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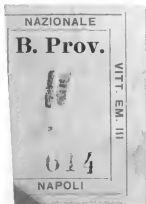
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1789 562

TABLES DE LOGARITHMES

DES NOMBRES DEPUIS 1 JUSQU'A 21750;

DES SINUS, COSINUS, TANGENTES et COTANGENTES
pour chaque minute du quart de cercle;

SUIVIES

D'une TABLE CENTÉSIMALE donnant les Logarithmes de ces
mêmes lignes pour chaque cent-millième du QUADRANS,
depuis 0,00000 jusqu'à 0,03000, et pour chaque dix-
millième depuis 0,0300 jusqu'à 0,5000.

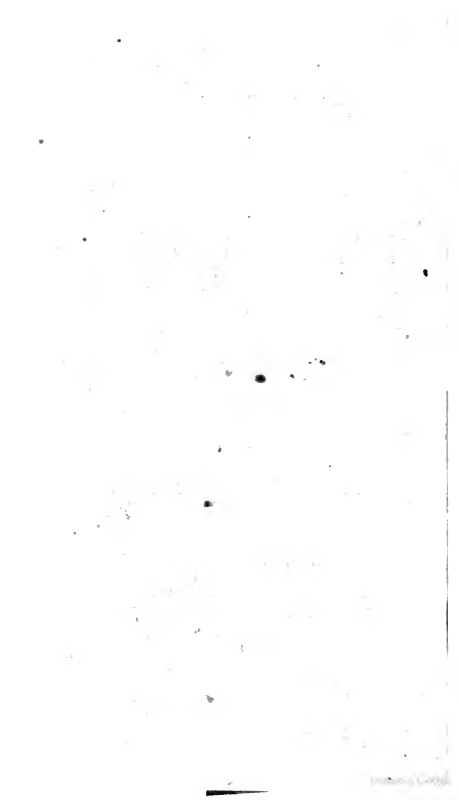
ÉDITION STÉRÉOTYPE,
GRAVÉE, FONDUE ET IMPRIMÉE
PAR FIRMIN DIDOT.



A PARIS,

FIRMIN DIDOT, Imprimeur-Libraire pour
les Mathématiques, la Marine et l'Architecture,
rue de Thionville, n° 10.

1809



AVERTISSEMENT

DE FIRMIN DIDOT.

J'AI fait paraître en 1795 l'édition in-8° stéréotype des Tables de logarithmes données par M. Callet. Elles offrent avec SEPT figures, indépendamment de la caractéristique, les logarithmes des nombres depuis 1 jusqu'à 108000, et les logarithmes sinus et tangentes de seconde en seconde pour les cinq premiers degrés, de dix en dix secondes pour tous les degrés du quart de cercle, et suivant la division centésimale de dix-millième en dix-millième ou minute nouvelle, etc. A chaque tirage, les fautes qui s'étaient glissées dans la première édition ont été corrigées d'après la revision de MM. Vega, Mascheroni, etc., et sur-tout de M. De Lalande, qui a mis à surveiller lui-même les corrections un zèle et un soin particuliers : aussi, depuis plus de cinq ans, n'a-t-on pas découvert dans les exemplaires des derniers tirages une seule faute, et on peut regarder ces éditions, et par conséquent celles qui paraîtront dorénavant, comme absolument correctes.

En 1802 a paru l'édition in-18 stéréotype, par J. De Lalande. Ces Tables donnent, avec CINQ figures, les logarithmes des nombres depuis 1 jusqu'à 10000, et les logarithmes des sinus et tangentes de minute en minute. Elles ont été corrigées avec tant de soin, que l'auteur n'a pas hésité de proposer 300 fr. pour chaque faute qu'on pourrait y découvrir.

Voici l'édition in-12 stéréotype, et du troisième format, que je mets sous les yeux du public. Ces Tables contiennent les logarithmes des nombres depuis 1 jusqu'à 21750, avec six figures, et les logarithmes des sinus et tangentes, de minute en minute. Elles sont plus commodes que celles de Lacaille pour leur disposition, la page contenant cinquante lignes pour les logarithmes des nombres, et soixante lignes pour les logarithmes des sinus. On y a ajouté les Tables de logarithmes sinus et tangentes calculées d'après la division centésimale du cercle, et disposées comme celles d'Ober et d'Ideler. Elles ont été revues avec le plus grand soin par des coopérateurs des grandes Tables de logarithmes, dites du Cadastre, et j'espère que MM. les calculateurs voudront bien nous indiquer les fautes qui auront pu échapper, afin

que ces Tables deviennent en peu de temps aussi correctes que les précédentes.

Actuellement je m'occupe de plus grands travaux, et je vais poursuivre la carrière que je me suis tracée en ce genre. Je commence à stéréotyper les Tables de logarithmes grand in-4°, par M. De Prony, directeur de l'Ecole Impériale des Ponts-et-Chaussées.

Ces Tables ont été construites, d'après les méthodes et sous les yeux de M. De Prony, par des calculateurs, payés à mes frais, qui avaient travaillé à ses grandes Tables, dites du Cadastre.

Elles contiennent, avec huit figures, indépendamment de la Caractéristique :

1° Les logarithmes des Nombres entiers depuis 1 jusqu'à 10 000.

2° Les logarithmes des Nombres, de dixième en dixième d'unité, depuis 10 000 jusqu'à 20 000.

3° Les logarithmes des Nombres entiers depuis 20 000 jusqu'à 100 000.

4° Les logarithmes Sinns et Tangentes, de seconde en seconde, pour tous les degrés du quart de cercle.

Les Tables des logarithmes des Nombres sont entièrement nouvelles, et quant au fond et quant à la forme. D'abord elles contiennent 200 000 logarithmes, et les Tables les plus étendues que nous ayons n'en contiennent que 108 000 : ensuite, quoique les logarithmes de Vlacq, à dix figures, ne soient employés, avec toutes leurs décimales, que dans des cas extraordinaires, il est d'autres cas, beaucoup moins rares, où on a besoin de sept chiffres significatifs parfaitement exacts, qu'on ne peut obtenir qu'avec des Tables à huit figures, indépendamment de la caractéristique ; les calculs astronomiques, ceux où il entre des quantités dépendantes de la figure de la terre, ceux des nombres fondamentaux de diverses Tables qu'on peut avoir à construire par des additions successives, etc., etc., offriraient une foule d'exemples de la nécessité dont nous parlons. Or, les Tables de Gardiner, de Callet et de Taylor ne donnent, en général, que six chiffres parfaitement exacts : on a, sur le septième, quand on le calcule, une petite incertitude, qui, dans les Tables de M. De Prony, se trouve renvoyée au huitième chiffre.

Cependant l'infériorité des anciennes Tables, quant au nombre de chiffres exacts qu'elles donnent, serait, en partie, compensée par la facilité de l'interpolation, au moyen des parties proportionnelles, si M. De Prony n'avait pas

cherché et trouvé le moyen de donner aux calculateurs, à cet égard, autant et même plus de facilité que ne leur en donnent ces anciennes Tables. C'est dans cette vue qu'il a fait calculer les logarithmes de 10 000 à 20 000 de dixième en dixième d'unité, et rendu ainsi, dans cet intervalle, les premières différences (qui sont les nombres fondamentaux des petites Tables marginales de parties proportionnelles) plus exactes, pour huit chiffres, qu'elles ne le sont pour sept chiffres, entre les mêmes limites, dans Gardiner, Callet, et Taylor. La marche par intervalles de dixième d'unités n'est plus nécessaire au-delà de 20 000.

Voilà la première fois que les Tables de Logarithmes donnent sept à huit chiffres par le simple usage des Tables marginales de parties proportionnelles; les Tables existantes à dix figures, qui seules peuvent donner ces sept à huit chiffres, exigent des calculs longs et fastidieux, et on peut ajouter que ces Tables sont rares et d'un prix très-élevé.

Enfin on trouve dans les Tables de M. De Prony, immédiatement, on a une, les logarithmes des Nombres entiers de 100 000 à 200 000 (on les prend entre 10 000 et 20 000, en employant la caractéristique convenable), autre circonstance nouvelle qui ajoute beaucoup à l'utilité de ces Tables.

Les divers avantages dont nous venons de parler auraient été perdus pour la Trigonométrie, c'est-à-dire, pour la branche de calcul où il importait le plus de les conserver, si les logarithmes Sinus et Tangentes n'avaient pas été calculés à huit figures, comme ceux des Nombres. Taylor, qui en a formé, ainsi que M. De Prony, une Table procédant de seconde en seconde, ne les donne qu'avec sept figures. Les Tables que j'annonce ont donc, à cet égard, une grande supériorité sur celles de Taylor; elles en ont une autre très-importante, relativement à la manière dont elles sont disposées pour prévenir toute erreur dans la recherche des Logarithmes, soit dans les Nombres, soit dans les Sinus. Un exemple pris au hasard justifiera mon assertion.

Dans les Tables de Taylor (voyez log. sin. de $23^{\circ} 13'$) la troisième ligne horizontale représente les trois chiffres qui doivent être placés immédiatement après la caractéristique 9, depuis 1 jusqu'à 55 inclusivement; le dernier à droite de ces chiffres n'est constant que jusqu'au log. sinus de $23^{\circ} 13' 55''$, et change à compter du log. suivant: le nombre 595 devient alors 596, mais rien n'indique explicitement dans ces Tables un tel changement, si ce n'est la rencontre d'un zéro formant la quatrième figure du logarithme; dans ce cas, le calculateur ne doit pas prendre

pour les trois premières figures du logarithme le nombre qui est en tête de la colonne, mais celles qui sont en tête de la colonne suivante ou précédente, à droite pour les sinus, et à gauche pour les cosinus. La plus légère distraction, inévitable lorsque la mémoire est suffisamment occupée d'un problème et de la méthode de le résoudre, fait nécessairement oublier de recourir à ces colonnes. Aussi M. Méchain avait-il eu le soin, je dirai même la patience, de marquer par un gros point, dans son exemplaire, dont j'ai fait l'acquisition, tous les endroits où le dernier chiffre de la tête des colonnes devait changer. Ces avertissements, qu'il avait crus indispensables pour ne pas être trompé, sont placés et dans la colonne, et à la tête de la colonne; ils se renouvellent ordinairement vingt fois par page, et trente fois dans quelques occasions. Il arrive même que la variation a lieu (voyez $\sin. 7^{\circ} 4'$) jusqu'à trois fois dans une seule colonne, ensorte que les trois chiffres de tête qui devraient s'appliquer à la plus grande partie de la colonne, n'existent nulle part.

Pour éviter ce grave inconvénient, j'ai cru devoir reporter, de dix en dix espaces, les trois chiffres de la tête des colonnes, et je les ai par-là rapprochés de l'œil du calculateur : il en résulte que la variation a souvent lieu dans les intervalles; ensuite lorsque, par la rencontre d'un zéro, le dernier des trois chiffres doit éprouver un changement, j'en ai averti par deux filets très-visibles, entre lesquels même sont placés les trois chiffres convenables, sans cependant déranger l'ordre typographique, ce qui ne laisse pas même la possibilité de se tromper une seule fois.

Pour prévenir toute erreur dans les logarithmes des Nombres, on a suivi la disposition ingénieuse établie par M. Callet.

Cette édition grand IN-QUARTO, d'un format plus commode que celui des Tables de Taylor, imprimée avec soin sur papier Nom-de-Jésus, mais fabriqué tout exprès pour l'édition même, et dont on délivrera aux Souscripteurs une feuille de modèle tant pour le caractère, le papier et le format, que pour la disposition des Tables, rue de Thionville, n° 10, est sous presse. Elle pourra paraître dans l'année 1810, s'il y a un nombre suffisant de Souscripteurs.

S O U S C R I P T I O N .

FIRMIN DIDOT n'a pas cru devoir employer jusqu'ici, pour ses opérations commerciales, le moyen des souscrip-

tions, dont on a quelquefois abusé. Il ne dissimule pas cependant qu'une telle entreprise, dont l'exécution pourrait être encore long-temps différée, ne fût terminée promptement, si un certain nombre de souscripteurs le secondait dans ses travaux. Indépendamment de fonds considérables, il faut prendre tant de peines, d'attention, de soins multipliés et renaissans pour donner avec exactitude une pareille édition, qu'il pense avoir droit à quelque faveur.

Il croit devoir rappeler à ses concitoyens, non pas que la Commission du Bureau des Longitudes (Secrétaire, M. le chevalier Harry Parker) a accordé à l'entrepreneur des Tables anglaises, à titre de gratification, un encouragement pécuniaire, moyen qui, utile et puissant en Angleterre, n'aurait peut-être pas le même effet en France; mais il croit devoir leur rappeler que l'entrepreneur a été secondé par un grand nombre de souscriptions. Il espère la même bienveillance.

Les noms des Princes, Dignitaires, particuliers ou libraires de tous les pays, seront inscrits avec la désignation du nombre d'exemplaires pour lequel chacun aura souscrit.

MM. les Souscripteurs pourront, s'ils le jugent à propos, ne payer que la moitié de la somme en souscrivant, et la seconde moitié en retirant l'ouvrage; il leur sera donné un reçu de la somme qu'ils auront remise.

Le discours préliminaire que compose actuellement M. De Prony, sera traduit en russe, en anglais, en allemand et en italien. Chaque exemplaire, en quelque langue qu'il soit, offrira la liste de MM. les Souscripteurs qui voudront bien indiquer leurs nom, prénoms et qualités, écrits très-distinctement: cette liste sera STÉRÉOTYPE comme l'édition, et se renouvelant toujours, portera à la postérité la plus reculée le nom des amis des sciences qui auront favorisé l'entreprise.

La Souscription des Tables de M. De Prony sera fermée à la fin de 1810; et si le nombre des souscriptions à cette époque n'excede pas celui de trois cents, l'argent sera déposé chez M. Schneider, notaire, rue Saint-Méry, et remis à MM. les Souscripteurs, qui voudront bien en faire passer le reçu.

Le prix de ces Tables sera de 96 francs pour le public, et seulement de 72 francs pour ceux qui auront souscrit chez FRAMIN DIDOT, Graveur de l'Imprimerie Impériale, et Imprimeur, rue du Regard, faubourg Saint-Germain, n° 1; ou à sa Librairie, rue de Thionville, n° 10.

DISCOURS

PRÉLIMINAIRE.



LES Tables suivantes sont à six figures pour les lignes trigonométriques et pour les nombres.

L'usage des instruments de géodésie, divisés suivant le système métrique, exigeant des tables centésimales, nous donnons les logarithmes des sinus, cosinus, tangentes et cotangentes pour la division nouvelle du quart de cercle.

Le rapport de l'ancienne division du quart de cercle à la nouvelle étant 0,9, et 90° valant 5400' ou 324000", le grade ou degré nouveau vaudra 54' de l'ancien ; le 0,0001 ou minute nouvelle vaudra $32\frac{1}{4}$ " et le 0,00001 sera égal à $3\frac{1}{4}$ ".

Ce rapport sert à convertir les degrés centésimaux en degrés sexagésimaux, et réciproquement.

Si l'on a 97 degrés nouveaux, pour connaître à quel nombre de degrés anciens ils répondent, il faut les multiplier par 9 et diviser le produit par 10, ce qui donne $87\frac{3}{10}$, ces $\frac{3}{10}$ multipliés par 60, donnent 18', donc 97 grades valent $87^\circ 18'$.

Cette expression 0,0201 ou 2 grades et une minute nouvelle, équivaut à $1^\circ 48' 32\frac{1}{4}$ ". En effet, en multipliant 201 par 9 il vient 1809, qu'il faut mettre sous cette forme $1^\circ 809$.

DISCOURS PRÉLIMINAIRE.

9

Multipliez 0,809 par 60 et vous aurez 48',540, multipliez encore 0,540 par 60 et il viendra 32'',4.

Réciproquement si l'on veut convertir 87° 18' en grades, il faut convertir 18' en parties décimales de degré, en les divisant par 60, et l'on aura $\frac{18}{60} = 0,3$, et diviser ensuite 87°,3 ou 87,3

par 9, il vient 97 grades, ou 0,^Q97. (Q exprimant le quart de cercle).

Soit encore 1° 48' 32'',4, à convertir en grades, commencez par convertir les secondes et dixièmes de seconde en décimales de minute, en prenant le sixième de 32'',4 rendu dix fois plus petit, et l'on aura 0',54; puis le sixième de 48',54, il viendra 0°,809, et enfin divisant 1°,809 par 0,9, pour avoir des grades, vous aurez 2 grades et une minute nouvelle ou 0,0201, comme nous le savions déjà.

Les méthodes employées pour calculer les logarithmes étant expliquées dans les traités d'algebre, nous croyons pouvoir nous dispenser de les rappeler au Lecteur. Nous nous bornerons à donner l'usage de ces Tables, en suivant le procédé de l'abbé Marie, toutes les fois qu'il pourra se concilier avec leur disposition.

USAGE DES TABLES.

Avant d'entrer en matiere, il est bon de rappeler que le logarithme d'un nombre entier quelconque, rendu 10,100,1000 fois plus grand que ce nombre, ne varie que dans sa caractéristique, c'est-à-dire que le logarithme de 3 étant 0,477121, celui de 30 sera 1,477121, celui

de 300 sera 2,477121, celui de 3000 sera 3,477121, etc.

1 étant le logarithme de 10; 2 celui de 100; 3 celui de 1000, pour rendre donc un nombre 10, 100, 1000 fois plus grand, il ne s'agit que d'ajouter 1 ou 2 ou 3 unités à la caractéristique de son logarithme.

LOGARITHMES DES NOMBRES.

Dans la recherche des logarithmes des nombres il se présente deux questions générales.

Étant donné un nombre, trouver son logarithme, et réciproquement étant donné un logarithme, trouver le nombre auquel il appartient.

Lorsque le nombre n'excede pas les limites des tables, son logarithme est toujours à la droite de ce nombre; ainsi, le logarithme de 3240 est 3,510545; celui de 32400 serait 4,510545, d'après ce que nous avons dit plus haut.

Mais si l'on demande le logarithme de 42758, qui excède les limites de ces Tables, il faut séparer par une virgule, sur la droite de ce nombre, le chiffre 8, et le nombre devient alors 4275,8; ce nombre est plus grand que 4275 et plus petit que 4276, son logarithme tombera entre ceux de ces deux nombres.

Cela posé, cherchez le logarithme de 4275, que vous trouverez être 3,630936. Pour avoir la quantité qu'il faut lui ajouter afin qu'il soit celui de 4275,8, voici comment il faut faire.

Prenez la différence 101 qui existe entre les logarithmes de 4275 et 4276, et dites : si pour une unité de différence entre deux nombres

on a 101 de différence entre leurs logarithmes, quelle sera celle pour 0,8, ou

$$1 : 101 :: 0,8 : x = 80,8,$$

quantité qu'il faudra ajouter au log. de 4275 pour avoir celui de 4275,8, mais comme ce nombre a été rendu dix fois plus petit, il faut augmenter d'une unité la caractéristique de son logarithme, et vous aurez 4,631017 pour log. de 42758.

Soit encore proposé de trouver le logarithme de 637482. Séparez deux chiffres sur la droite par une virgule, afin que la partie restante se trouve dans les Tables, et vous aurez à chercher le log. de 6374,82, il est 3,804412 pour 6374 seulement; pour avoir la quantité qu'il faut ajouter à ce log., afin d'avoir celui de 6374,82, multipliez 0,82 par 68, différence entre les logarithmes de 6374 et 6375, et vous aurez la quantité 55,76, qui, ajoutée au logarithme de 6374, donnera 5,804468, après toutefois avoir augmenté de deux unités sa caractéristique, pour avoir le log. de 637482, nombre cent fois plus grand que 6374,82.

Pour avoir le logarithme du carré ou du cube d'un nombre, il faut doubler ou tripler le log. de ce nombre; exemple :

On demande le logarithme du carré de 25 : multipliez par 2 le log. de 25, qui est 1,397940, et il viendra 2,795880 pour logarithme de 625, carré de 25; réciproquement pour avoir la racine carrée ou cubique d'un nombre, prenez la moitié ou le tiers de son logarithme, le reste sera le log. de la racine.

Quelle est la racine carrée de 7056? le log.

de ce nombre est 3,848559, dont la moitié 1,924279 répond à 84, racine quarrée cherchée.

Ce principe est une conséquence de la propriété qu'ont les logarithmes de changer la multiplication ou la division d'un nombre par un autre en une addition ou soustraction de leurs logarithmes.

Passons aux logarithmes des nombres entiers, joints à des fractions ordinaires ou décimales.

On demande le logarithme de $28\frac{2}{3}$; réduisez le tout en fraction, ce qui donne $\frac{142}{3}$, prenez le logarit. du numérateur, que vous trouverez être 2,152288, retranchez-en 0,698970, log. du dénominateur 5, la différence 1,453318 sera le log. cherché. Donc, le logarithme d'une fraction est égal au log. du numérateur moins celui du dénominateur; mais comme le log. du numérateur est toujours plus petit que celui du dénominateur, dans une fraction proprement dite, il faut supposer la caractéristique du log. du numérateur plus forte de 10 unités, sans cela le reste de la soustraction serait négatif, quant à la caractéristique seulement, ou il serait tout négatif en retranchant le numérateur du dénominateur. D'après ce principe le log. de $\frac{2}{3}$ sera $10,301030 - 0,477121 = 9,823909$. Dans le cas de la caractéristique négative, il serait $\bar{1},823909$; mais, si l'on veut que le log. de $\frac{2}{3}$ soit négatif dans tous ses chiffres, on aura $-0,176091$. Le log. d'une fraction plus petite que l'unité pouvant être exprimé de trois manières différentes; par exemple, logarithme $\frac{2}{3} = 9,823909 = \bar{1},823909 = -0,176091$; le logar. de $\frac{1}{16}$ serait 8,795880, ou $\bar{2},795880$, ou $-1,204120$.

Le cas de la caractéristique seule négative nous paraît préférable aux deux autres, parce que dans le premier cas, il faut, après l'emploi d'un log. de cette nature, se rappeler que la caractéristique est trop grande de 10 unités, et dans le deuxième cas, lorsqu'on veut ajouter un logarithme tout négatif, il faut le soustraire, et que pour le soustraire il faut l'ajouter. La caractéristique seule négative a la propriété d'indiquer le rang qu'occupe après la virgule le premier chiffre significatif du nombre correspondant ; ainsi le logar. de $\frac{1}{625}$ ou de 0,0625 qu'on a trouvé ci-dessus de 2,795880, a pour caractéristique 2, parce que le premier chiffre significatif 6 occupe le second rang après la virgule ; à l'égard des décimales 795880 du log. ce sont les mêmes que celles de 625. On reconnaîtra la vérité de ce principe en se rappelant que le logarithme de 1000 = 3

celui de 100 = 2

10 = 1

1 = 0

0,1 = — 1

0,01 = — 2

0,001 = — 3 etc., etc.

Quel sera le logarithme de 44,76 ? en ôtant la virgule, le nombre devient 4476, qui est cent fois plus grand. De la caractéristique du log. de ce dernier nombre, qui est 3,650890, retranchez deux unités et vous aurez le log. de 44,76. Donc, lorsqu'il s'agit d'avoir le log. d'un entier, joint à une fraction décimale, on fait abstraction de la virgule, mais on a soin de diminuer la caractéristique du log. du nombre

ainsi préparé, d'autant d'unités qu'il y a de chiffres à la droite de la virgule.

De cette manière, le log. de 0,5249 sera le même que celui de 5249 avec une caractéristique plus petite de quatre unités; mais comme le log. de 5249 est 3,720077, vous aurez 1,720077 pour log. de 0,5249.

Maintenant étant donné un logarithme, trouver le nombre qui lui répond.

Lorsque le logarithme est tout entier dans les Tables, nulle difficulté pour trouver le nombre qui lui appartient, il est toujours à la gauche de ce logarithme.

Nous ne donnerons donc d'exemples que pour les logarithmes qui ne se trouvent pas tout entiers dans les Tables.

Soit proposé de trouver à quel nombre appartient le log. 3,976875, ce log. tombe entre ceux de 9481 et de 9482; le nombre qui lui correspond dans les Tables sera donc un entier et une fraction; pour avoir cette fraction, il faut ici faire la proportion inverse, et dire: si 46 différence entre les log. de 9481 et 9482 répond à 1, différence entre ces deux nombres, à quel nombre répondra 21, qui est la différence entre le log. proposé et celui de 9481, ou

$$46 : 1 :: 21 : x = \frac{21}{46} = 0,456.$$

Donc, le nombre cherché sera 9481,456.

A quel nombre répond le logarit. 5,730102? ce log., cherché avec la caractéristique 3, tombe entre ceux de 5371 et 5372; pour avoir la fraction qui doit accompagner le nombre demandé, dites :

$$81 : 1 :: 41 : x = \frac{41}{81} = 0,506.$$

Donc, le nombre sera 5371,51; mais comme vous avez diminué la caractéristique de deux unités, il faut rendre ce nombre cent fois plus grand, et l'on a 537151.

Soit encore proposé de trouver le nombre correspondant au log. 0,129082 : cherchez ce log. avec une caractéristique plus forte de trois unités, et vous remarquerez qu'il tombe entre ceux de 1346 et 1347; le nombre cherché sera alors 1346, plus une fraction; que vous obtiendrez par la proportion suivante :

$$323 : 1 :: 37 : x = \frac{37}{323} = 0,11.$$

Le nombre 1346,11 appartiendra bien au logarithme 3,129082. Pour avoir celui qui répond à 0,129082, il faut reculer la virgule de trois rangs vers la gauche, parce que vous avez ajouté trois unités à la caractéristique de ce logarithme, ce qui donnera enfin 1,34611 pour le nombre cherché.

On voit par ces exemples que lorsque la caractéristique d'un logarithme est plus forte ou plus petite que celle des Tables, il faut la diminuer ou l'augmenter d'une ou plusieurs unités.

Passons à la recherche des logarithmes des sinus, cosinus, tangentes et cotangentes de la division sexagésimale.

USAGE DES TABLES SEXAGÉSIMALES.

Ces Tables comprennent les logarithmes des sinus, cosinus, tangentes et cotangentes artificiels ou logarithmiques; ce sont les logarithmes des sinus, cosinus, etc. naturels, calculés sur

celui du rayon divisé en 10000000000 de parties, dont la caractéristique est 10.

Les tangentes au-dessus de 45° étant plus grandes que le rayon, on a supprimé la dizaine qui est à leur caractéristique.

Dans les 3 premiers degrés de ces Tables, on n'a pas mis les différences des logarithmes, à cause de leur trop grande inégalité, mais on y a suppléé par des logarit. dont les quatre premiers chiffres 4,685 sont placés au haut de la page, et les trois derniers vis-à-vis chaque minute correspondante; ceux de la gauche sont pour les sinus et ceux de la droite pour les tangentes : ces logarithmes ne sont autre chose que la différence entre le logarithme du sinus ou de la tangente dont il s'agit et le logarithme du nombre de secondes de cet angle. Par exemple, le logarithme 4,685531 répond au logarithme de sinus de $1^\circ 25'$; c'est la différence entre 8,393101 et 3,707570 qui est le logarit. de 5190 secondes = $1^\circ 25'$.

Faisons une application : on demande le log. de $1^\circ 26' 30''$ ou de 5190", c'est 3,715167; ajoutez à ce log. 4,685529, qui répondrait à $1^\circ 26' 30''$, et vous aurez 8,400696, logarithme cherché. En opérant ainsi, le log. de $2^\circ 15' 35''$ serait à-peu-près 8,595820 : on procède de même pour les tangentes.

Réciproquement étant donné 8,583615 pour le logarithme de la tangente d'un angle inconnu ; il faut oter 4,685788 (log. correspondant au logarit. tang. le plus approchant de 8,583615) du log. proposé 8,583615, le reste 3,897827 cherché dans les tables des log. des

nombres, répond à $7904'' = 2^{\circ} 11' 44''$, et c'est à très-peu près l'angle demandé.

Autre application : soit proposé de trouver le log. tangente d'un angle de 87° à 90° degrés, de $89^{\circ} 5' 54''$, par exemple, il faut ajouter 6,488651 complément arithmétique du log. de $0^{\circ} 54' 6''$, pris dans les tables des log. des nombres, avec 5,314390 complément arithmétique du logarit. 4,685610, qui répond à la tangente de $0^{\circ} 54' 6''$, ce qui donne 1,803041 pour logarit. tangente de $89^{\circ} 5' 54''$.

Réciproquement, étant donné un logarit. tangente d'un angle compris entre 87° et 90° tel que 1,390508, trouver à quel angle il répond : ajoutez 5,314186 (complément arith. du log. 4,685814 qui répond au log. tangente donné), au complément arithmétique du log. proposé (8,609492). La table des log. des nombres vous apprendra que la somme 3,923678 des deux compléments est le log. de $2^{\circ} 19' 48''$, à très-peu près ; ainsi l'angle cherché est $87^{\circ} 40' 12''$, environ.

Lorsqu'un angle est au-dessous de 45° , son log. sinus est à côté du nombre de ses minutes, qui se comptent en descendant ; ainsi le log. du sinus de $32^{\circ} 24'$ est 9,729024 ; celui de $32^{\circ} 26'$ est 9,729422 ; les tangentes, les cotangentes et les cosinus se trouvent de même chacun dans sa colonne.

Lorsque l'angle est entre 45° et 90° , le log. de son sinus est dans la dernière colonne ; il faut alors compter les minutes en montant. Ainsi, pour trouver le log. sinus de $57^{\circ} 34'$, complément de $32^{\circ} 26'$, cherchez à la page où

vous avez pris celui de ce dernier angle et vous verrez au bas sur la droite le titre sinus 57 ; montez le long de cette colonne et vous trouverez $57^{\circ} 34'$, dont le logarithme sinus est 9,926351.

Le logarithme sinus ou tangente d'un angle obtus est le même que celui de son supplément ; il n'y a donc aucun angle estimé seulement en degrés et minutes dont on ne trouve aussitôt dans les tables le sinus , cosinus , etc. ; mais lorsqu'il y a des secondes, il faut pour trouver la quantité à ajouter au log. du nombre de degrés et minutes, faire la proportion suivante :

60" différence des deux angles entre lesquels tombe le log. donné est à la différence de leurs log. comme la différence entre le log. donné et celui qui est plus petit que lui est à un quatrième terme qui est la quantité à ajouter ; exemple :

On demande le log. du sinus de $23^{\circ} 42' 28''$; celui de $23^{\circ} 42'$ est 9,604170 , pour avoir la quantité correspondante à 28" dites :

60", différence des deux angles entre lesquels tombe l'angle donné, est à 287, différence des log. sinus de ces deux angles, comme 28", diff. entre l'angle donné et celui qui est plus petit que lui, est à un quatrième terme qu'il faut ajouter au log. trouvé pour les deg. et minutes, c'est-à-dire,

$$60'' : 287 :: 28'' : x = \frac{2 \cdot 28}{6} = 134$$

le log. cherché sera donc 9,604304.

Cette méthode est commune à toutes les tables ; nous allons en donner une qui est particulière à la disposition de celles-ci. Appliquons-la à notre exemple : elle consiste à multiplier

6,79 (*) que l'on voit dans la petite colonne qui vient immédiatement après celle des sinus,

(*) Pour expliquer le procédé de calcul des quantités enfermées dans les petites colonnes, nous nous servirons d'une remarque qu'a bien voulu nous communiquer M. Haros, géometre très-habile.

Dans l'édition de 1768 des Tables de l'abbé Marie, il est lit, page 41, que la fraction que l'on donne de trois en trois log. sinus ou log. tang. etc., tient lieu de la partie proportionnelle qu'il faut ajouter au log. pour chaque seconde, en ne prenant ce log. qu'avec cinq décimales seulement.

Il est donc évident que cette partie proportionnelle pour les log. à six décimales doit être dix fois plus grande, et c'est ce qu'on a fait dans l'édition de ces Tables. Cette partie proportionnelle pour une seconde est toujours égale à la soixantième partie de la différence entre deux log. voisins; ainsi, pour avoir la partie proportionnelle moyenne cinq log. de suite, il faut d'abord diviser par 5 la différence des log. pris de 5 en 5, et diviser ensuite le quotient par 60, ou, ce qui revient au même, diviser chaque différence de 5 en 5 logarithmes par 5 fois 60 ou 300, ce qui se fait facilement en séparant par un point deux chiffres et en prenant le tiers; tel est le procédé qu'on a employé pour déterminer la partie proportionnelle relative à une seconde de variation.

Les Tables de l'abbé Marie ont l'inconvénient de ne donner la partie proportionnelle relative à 1" de variation que pour les log. sinus ou tangentes à cinq décimales, tandis que ces mêmes log. ont six décimales, ce qui est une source d'erreurs pour les personnes qui veulent en faire usage. Nos Tables n'auront point cet inconvénient.

Application.

Soit proposé de trouver le log. sinus de $26^{\circ} 25' 37''$: le log. de $26^{\circ} 25'$ est 9,648258, et la partie proportionnelle relative à une seconde de variation est 4,24; donc en multipliant 4,24 par 37, on aura 156,88 ou 157 à ajouter à 9,648258, ce qui donnera 9,648415 pour le log. sinus de $26^{\circ} 25' 37''$.

Par les Tables de l'abbé Marie, la partie proportionnelle est 0,424, parce qu'elle n'appartient qu'à des log. à cinq décimales.

par $28''$ et l'on a pour produit 13412 ; séparez deux chiffres sur la droite et ajoutant 134 à 9,604170, vous aurez 9,604304, comme ci-dessus.

Autre exemple : on demande quel est le log. sinus de $135^{\circ} 52' 39''$; réponse, le même que celui de $44^{\circ} 7' 21''$, son supplément ; or, ce dernier est pour les degrés et les minutes égal à 9,842685 : la fraction 2,17 qui tient lieu de partie proportionnelle multipliée par $21''$ donne 45,57, ou 46, ajoutez cette quantité au log. trouvé, il vient 9,842731 pour le logarithme cherché.

On trouve de même le log. de la tangente de tout angle compris entre 3° et 90° , en multipliant la partie proportionnelle commune aux tangentes et cotangentes par le nombre de secondes. Ainsi, le log. tangente de $44^{\circ} 7' 21''$ est pour les degrés et minutes 9,986607 ; multipliez 4,21 par $21''$, le produit 88,41 ajouté à ce log. donnera 9,986695.

Pour trouver maintenant les degrés, minutes et secondes d'un angle dont on connaît le log. sinus, il faut faire l'inverse de la deuxième méthode.

Exemple : soit le log. 9,822917 que l'on sait d'ailleurs être celui d'un sinus ; cherchez le log. sinus prochainement plus petit dans les Tables, il répond à $41^{\circ} 41'$, ajoutez deux zéros à la différence 87 de ces deux log. et divisez 8700 par la partie proportionnelle correspondante 236, le quotient 36,8 marque les secondes et les dixièmes qu'il faut ajouter à $41^{\circ} 41'$, en sorte qu'on a $41^{\circ} 41' 36'',8$.

Cherchons encore à quel angle répond $0,573776$ log. tangente : il faut dans ce cas lire de bas en haut , et vous trouverez qu'il répond à $75^{\circ} 3'$; pour avoir les secondes ajoutez deux zéros à la différence 310 des deux log. $0,573776$ et $0,573466$ et divisez par la partie proportionnelle correspondante 844 , le quotient $36'',7$ sera le nombre de secondes et dixièmes à ajouter à $75^{\circ} 3'$.

Le nombre de degrés , minutes et secondes de $9,968398$, cherché de cette manière, serait log. sinus de $68^{\circ} 24' 22'', 6$.

USAGE DES TABLES CENTÉSIMALES.

Après ce qui a été dit sur l'usage des tables sexagésimales, il reste peu de chose à dire sur les tables centésimales.

Ces Tables donnent de cent-millième en cent-millième du quart de cercle ($3'', 24$) les log. sinus, cosinus, tangentes et cotangentes, depuis $0,00000$ jusqu'à $0,03000$, et de dix-millième en dix-millième ($32'', 4$) depuis $0,0300$ jusqu'à $0,5000$, pour les nouveaux degrés du quart de cercle.

Pour trouver le log. sinus et tangente des petits arcs qui ne sont point dans ces Tables, le procédé est le même que celui que nous avons employé à la recherche des secondes et parties décimales de secondes, dans la division sexagésimale : exemple, quel est le log. sinus de $0,023578$?

Cherchez d'abord celui de $0,02357$, qui est $8,568380$, pour avoir ce qu'il faut ajouter à ce log. sinus, afin d'avoir celui de $0,023578$, dites :

$1 : 184 :: 0,8 : x = 184 \times 0,8 = 147,2$, quantité qui ajoutée au premier log. donne 8,568527 pour le log. sinus de 0,023578, en procédant de même, le log. sinus de 0,001049 serait 7,216893; cet arc répond à $0^{\circ} 5' 39'', 876$.

Le log. tangente de 0,025585 serait 8,604339, répondant à log. tangente de $2^{\circ} 18' 9'', 54$.

Réciproquement, cherchons à six décimales l'arc appartenant au log. d'un sinus qui n'est pas dans les Tables : soit par exemple 8,660398, que l'on sait être un log. sinus, ce logarithme cherché dans la Table approche de celui de 0,02913; pour avoir la sixième décimale il faut faire l'opération inverse, et dire; $149 : 1 :: 89 : x = \frac{89}{149} = 0,59$, donc la sixième décimale est 6, et vous aurez pour l'arc cherché 0,029136.

Nous ne donnons point d'exemples pour la recherche des grands arcs, qui n'offre aucune difficulté.

Ne nous étant proposé que d'enseigner ici l'usage de ces Tables, nous pensons que ce que nous en avons dit suffira pour mettre promptement le calculateur à même de s'en servir.

Ch. PLAUZOLE.



TABLES
DE
LOGARITHMES
DES NOMBRES
DEPUIS 1 JUSQU'A 21750.



O. O' O"			N. O. O' 50"			N. O. 1' 40"		
Logarith.	Dif.		Logarith.	Dif.		Logarith.	Dif.	
0 Inf. neg.			50 1.698970	8600		100 2.000000	4391	
1 0.000000	301030		51 1.707570	8433		101 2.004321	4779	
2 0.301030	176091		52 1.716003	8273		102 2.008600	5187	
3 0.477121	124939		53 1.724276	8118		103 2.012837	5596	
4 0.602060	96910		54 1.732394	7969		104 2.017033	5956	
5 0.698970	79181		55 1.740363	7825		105 2.021189	6317	
6 0.778151	66947		56 1.748188	7687		106 2.025306	6678	
7 0.845098	57992		57 1.755875	7553		107 2.029384	7040	
8 0.903090	51153		58 1.763428	7424		108 2.033424	7402	
9 0.954243	45757		59 1.770852	7299		109 2.037426	7767	
10 1.000000	41393		60 1.778151	7179		110 2.041393	8130	
11 1.041393	37788		61 1.785330	7062		111 2.045323	8495	
12 1.079181	34762		62 1.792392	6949		112 2.049218	8860	
13 1.113943	32185		63 1.799341	6839		113 2.053078	9227	
14 1.146128	29963		64 1.806180	6733		114 2.056905	9593	
15 1.176091	28029		65 1.812913	6631		115 2.060698	9960	
16 1.204120	26329		66 1.819544	6531		116 2.064458	10328	
17 1.230449	24824		67 1.826075	6434		117 2.068186	10696	
18 1.255273	23481		68 1.832509	6340		118 2.071882	11065	
19 1.278754	22276		69 1.838849	6249		119 2.075547	11434	
20 1.301030	21189		70 1.845098	6160		120 2.079181	11804	
21 1.322219	20204		71 1.851258	6074		121 2.082785	12175	
22 1.342423	19305		72 1.857332	5991		122 2.086360	12545	
23 1.361728	18483		73 1.863323	5909		123 2.089905	12917	
24 1.380211	17729		74 1.869232	5829		124 2.093422	13288	
25 1.397940	17033		75 1.875061	5753		125 2.096910	13661	
26 1.414973	16391		76 1.880814	5677		126 2.100371	14033	
27 1.431364	15794		77 1.886491	5604		127 2.103804	14406	
28 1.447158	15240		78 1.892095	5532		128 2.107210	14780	
29 1.462398	14723		79 1.897627	5463		129 2.110590	15153	
30 1.477121	14241		80 1.903090	5395		130 2.113943	15528	
31 1.491362	13788		81 1.908485	5329		131 2.117271	15903	
32 1.505150	13364		82 1.913814	5264		132 2.120574	16278	
33 1.518514	12965		83 1.919078	5201		133 2.123852	16653	
34 1.531479	12589		84 1.924279	5140		134 2.127105	17028	
35 1.544068	12235		85 1.929419	5079		135 2.130334	17403	
36 1.556303	11899		86 1.934498	5021		136 2.133539	17778	
37 1.568202	11582		87 1.939519	4964		137 2.136721	18153	
38 1.579784	11281		88 1.944483	4907		138 2.139879	18528	
39 1.591065	10995		89 1.949390	4853		139 2.143015	18903	
40 1.602060	10724		90 1.954243	4798		140 2.146128	19278	
41 1.612784	10465		91 1.959041	4747		141 2.149219	19653	
42 1.623249	10219		92 1.963788	4695		142 2.152288	20028	
43 1.633468	9985		93 1.968483	4645		143 2.155336	20403	
44 1.643453	9760		94 1.973128	4596		144 2.158362	20778	
45 1.653213	9545		95 1.977724	4547		145 2.161368	21153	
46 1.662758	9340		96 1.982271	4501		146 2.164353	21528	
47 1.672098	9143		97 1.986772	4454		147 2.167317	21903	
48 1.681241	8955		98 1.991226	4409		148 2.170262	22278	
49 1.690196	8774		99 1.995635	4365		149 2.173186	22653	
50 1.698970			100 2.000000			150 2.176091	23028	



N.	0. 2' 30"	Dif.	N.	0. 3' 20"	Dif.	N.	0. 4' 10"	Dif.
	Logarith.			Logarith.			Logarith.	
150	2.176091		200	2.301030		250	2.397940	
151	2.178977	2886	201	2.303196	2166	251	2.399674	1734
152	2.181844	2867	202	2.305351	2155	252	2.401401	1727
153	2.184691	2847	203	2.307496	2145	253	2.403121	1720
154	2.187521	2830	204	2.309630	2134	254	2.404834	1713
155	2.190332	2811	205	2.311754	2124	255	2.406540	1706
156	2.193125	2793	206	2.313867	2113	256	2.408240	1700
157	2.195900	2775	207	2.315970	2103	257	2.409933	1693
158	2.198657	2757	208	2.318063	2093	258	2.411620	1687
159	2.201397	2740	209	2.320146	2083	259	2.413300	1680
160	2.204120	2723	210	2.322219	2073	260	2.414973	1673
161	2.206826	2706	211	2.324282	2063	261	2.416641	1668
162	2.209515	2689	212	2.326336	2054	262	2.418301	1660
163	2.212188	2673	213	2.328380	2044	263	2.419956	1655
164	2.214844	2656	214	2.330414	2034	264	2.421604	1648
165	2.217484	2640	215	2.332438	2024	265	2.423246	1642
166	2.220108	2624	216	2.334454	2016	266	2.424882	1636
167	2.222716	2608	217	2.336460	2006	267	2.426511	1629
168	2.225309	2593	218	2.338456	1996	268	2.428135	1624
169	2.227887	2578	219	2.340444	1988	269	2.429752	1617
170	2.230449	2562	220	2.342423	1979	270	2.431364	1612
171	2.232996	2547	221	2.344392	1969	271	2.432969	1605
172	2.235528	2532	222	2.346353	1961	272	2.434566	1600
173	2.238046	2518	223	2.348305	1952	273	2.436163	1594
174	2.240549	2503	224	2.350248	1943	274	2.437751	1588
175	2.243038	2489	225	2.352183	1935	275	2.439333	1582
176	2.245513	2475	226	2.354108	1925	276	2.440909	1576
177	2.247973	2460	227	2.356026	1918	277	2.442480	1571
178	2.250420	2447	228	2.357935	1909	278	2.444045	1565
179	2.252853	2433	229	2.359835	1900	279	2.445604	1559
180	2.255273	2420	230	2.361728	1893	280	2.447158	1554
181	2.257679	2406	231	2.363612	1884	281	2.448706	1548
182	2.260071	2392	232	2.365488	1876	282	2.450249	1543
183	2.262451	2380	233	2.367356	1868	283	2.451786	1537
184	2.264818	2367	234	2.369216	1860	284	2.453318	1532
185	2.267172	2354	235	2.371068	1852	285	2.454845	1527
186	2.269513	2341	236	2.372912	1844	286	2.456366	1521
187	2.271842	2329	237	2.374748	1836	287	2.457882	1516
188	2.274158	2316	238	2.376577	1829	288	2.459392	1510
189	2.276462	2304	239	2.378398	1821	289	2.460898	1506
190	2.278754	2292	240	2.380211	1813	290	2.462398	1500
191	2.281033	2279	241	2.382017	1806	291	2.463893	1495
192	2.283301	2268	242	2.383815	1798	292	2.465383	1490
193	2.285557	2256	243	2.385606	1791	293	2.466868	1485
194	2.287802	2245	244	2.387390	1784	294	2.468347	1479
195	2.290035	2233	245	2.389166	1776	295	2.469822	1475
196	2.292256	2221	246	2.390935	1769	296	2.471292	1470
197	2.294466	2210	247	2.392697	1762	297	2.472756	1464
198	2.296665	2199	248	2.394452	1755	298	2.474216	1460
199	2.298853	2188	249	2.396199	1747	299	2.475671	1455
200	2.301030	2177	250	2.397940	1741	300	2.477121	1450

N.	0. 5' 0"	Dif.	N.	0. 5' 50"	Dif.	N.	0. 6' 40"	Dif.
300	2.477121		350	2.544068		400	2.602060	
301	2.478566	1445	351	2.545307	1239	401	2.603144	1084
302	2.480007	1441	352	2.546543	1236	402	2.604226	1082
303	2.481443	1436	353	2.547775	1232	403	2.605305	1079
304	2.482874	1431	354	2.549003	1228	404	2.606381	1076
305	2.484300	1426	355	2.550228	1225	405	2.607455	1074
306	2.485721	1421	356	2.551450	1222	406	2.608526	1071
307	2.487138	1417	357	2.552668	1218	407	2.609594	1068
308	2.488551	1413	358	2.553883	1215	408	2.610660	1066
309	2.489958	1407	359	2.555094	1211	409	2.611723	1063
310	2.491362	1404	360	2.556303	1209	410	2.612784	1061
311	2.492760	1398	361	2.557507	1204	411	2.613842	1058
312	2.494155	1395	362	2.558709	1202	412	2.614897	1055
313	2.495544	1389	363	2.559907	1198	413	2.615950	1053
314	2.496930	1386	364	2.561101	1194	414	2.617000	1050
315	2.498311	1381	365	2.562293	1192	415	2.618048	1048
316	2.499687	1376	366	2.563481	1188	416	2.619093	1045
317	2.501059	1372	367	2.564666	1185	417	2.620136	1043
318	2.502427	1368	368	2.565848	1182	418	2.621176	1040
319	2.503791	1364	369	2.567026	1178	419	2.622214	1038
320	2.505150	1359	370	2.568202	1176	420	2.623249	1035
321	2.506505	1355	371	2.569374	1172	421	2.624282	1033
322	2.507856	1351	372	2.570543	1169	422	2.625312	1030
323	2.509203	1347	373	2.571709	1166	423	2.626340	1028
324	2.510545	1342	374	2.572872	1163	424	2.627366	1026
325	2.511883	1338	375	2.574031	1159	425	2.628389	1023
326	2.513218	1335	376	2.575188	1157	426	2.629410	1021
327	2.514548	1330	377	2.576341	1153	427	2.630428	1018
328	2.515874	1326	378	2.577492	1151	428	2.631444	1016
329	2.517196	1322	379	2.578639	1147	429	2.632457	1013
330	2.518514	1318	380	2.579784	1145	430	2.633468	1011
331	2.519828	1314	381	2.580925	1141	431	2.634477	1009
332	2.521138	1310	382	2.582063	1138	432	2.635483	1007
333	2.522444	1306	383	2.583199	1136	433	2.636488	1004
334	2.523746	1302	384	2.584331	1132	434	2.637490	1002
335	2.525045	1299	385	2.585461	1130	435	2.638489	999
336	2.526339	1294	386	2.586587	1126	436	2.639486	997
337	2.527630	1291	387	2.587711	1124	437	2.640481	995
338	2.528917	1287	388	2.588832	1121	438	2.641474	993
339	2.530200	1283	389	2.589950	1118	439	2.642465	991
340	2.531479	1279	390	2.591065	1115	440	2.643453	988
341	2.532754	1275	391	2.592177	1112	441	2.644439	986
342	2.534026	1272	392	2.593286	1109	442	2.645422	983
343	2.535294	1268	393	2.594393	1107	443	2.646404	982
344	2.536558	1264	394	2.595496	1103	444	2.647383	979
345	2.537819	1261	395	2.596597	1101	445	2.648360	977
346	2.539076	1257	396	2.597695	1098	446	2.649333	975
347	2.540329	1253	397	2.598791	1096	447	2.650308	973
348	2.541579	1250	398	2.599883	1092	448	2.651278	970
349	2.542825	1246	399	2.600973	1090	449	2.652246	968
350	2.544068	1243	400	2.602060	1087	450	2.653213	967

N.	0. 7' 30"	Dif.	N.	0. 8' 20"	Dif.	N.	0. 9' 10"	Dif.
	Logarith.			Logarith.			Logarith.	
450	2.653213		500	2.698970	868	550	2.740363	
451	2.654177	964	501	2.699838	868	551	2.741152	789
452	2.655138	961	502	2.700704	866	552	2.741939	787
453	2.656098	960	503	2.701568	864	553	2.742725	786
454	2.657056	958	504	2.702431	863	554	2.743510	785
		955			860			783
455	2.658011		505	2.703291	860	555	2.744293	782
456	2.658965	954	506	2.704151	857	556	2.745075	780
457	2.659916	951	507	2.705008	856	557	2.745855	779
458	2.660865	949	508	2.705864	854	558	2.746634	778
459	2.661813	948	509	2.706718	852	559	2.747412	776
		945			851			775
460	2.662758		510	2.707570	849	560	2.748188	773
461	2.663701	943	511	2.708421	847	561	2.748963	772
462	2.664642	941	512	2.709270	846	562	2.749736	771
463	2.665581	939	513	2.710117	844	563	2.750508	769
464	2.666518	937	514	2.710963	843	564	2.751279	768
		935			841			767
465	2.667453		515	2.711807	839	565	2.752048	765
466	2.668386	933	516	2.712650	837	566	2.752816	764
467	2.669317	931	517	2.713491	836	567	2.753583	763
468	2.670246	929	518	2.714330	835	568	2.754348	761
469	2.671173	927	519	2.715167	833	569	2.755112	760
		925			831			759
470	2.672098		520	2.716003	828	570	2.755875	757
471	2.673021	923	521	2.716838	827	571	2.756636	756
472	2.673942	921	522	2.717671	825	572	2.757396	754
473	2.674861	919	523	2.718502	823	573	2.758155	753
474	2.675778	917	524	2.719331	822	574	2.758912	752
		916			820			751
475	2.676694		525	2.720159	819	575	2.759668	749
476	2.677607	913	526	2.720986	817	576	2.760422	748
477	2.678518	911	527	2.721811	815	577	2.761176	747
478	2.679428	910	528	2.722634	814	578	2.761928	746
479	2.680336	908	529	2.723456	813	579	2.762679	744
		905			811			743
480	2.681241		530	2.724276	809	580	2.763428	742
481	2.682145	904	531	2.725095	807	581	2.764176	740
482	2.683047	902	532	2.725912	806	582	2.764923	739
483	2.683947	900	533	2.726727	805	583	2.765669	737
484	2.684845	898	534	2.727541	803	584	2.766413	735
		897			802			734
485	2.685742		535	2.728354	801	585	2.767156	733
486	2.686636	894	536	2.729165	800	586	2.767898	731
487	2.687529	893	537	2.729974	799	587	2.768638	730
488	2.688420	891	538	2.730782	798	588	2.769377	729
489	2.689309	889	539	2.731589	796	589	2.770115	728
		887			795			727
490	2.690196		540	2.732394	794	590	2.770852	726
491	2.691081	885	541	2.733197	793	591	2.771587	725
492	2.691965	884	542	2.733999	792	592	2.772322	724
493	2.692847	882	543	2.734800	791	593	2.773055	723
494	2.693727	880	544	2.735599	790	594	2.773786	722
		878			789			721
495	2.694605		545	2.736397	788	595	2.774517	720
496	2.695482	877	546	2.737193	787	596	2.775246	719
497	2.696356	874	547	2.737987	786	597	2.775974	718
498	2.697229	873	548	2.738781	785	598	2.776701	717
499	2.698101	872	549	2.739572	784	599	2.777427	716
500	2.698970	869	550	2.740363	783	600	2.778151	715

N.	0. 10' 0"	Dif.	N.	0. 10' 50"	Dif.	N.	0. 11' 40"	Dif.
600	2.778151		650	2.812913		700	2.845098	
601	2.778874	723	651	2.813581	668	701	2.845718	620
602	2.779596	722	652	2.814248	667	702	2.846337	619
603	2.780317	721	653	2.814913	665	703	2.846955	618
604	2.781037	720	654	2.815578	665	704	2.847573	618
		718			663			616
605	2.781755		655	2.816241		705	2.848189	
606	2.782473	718	656	2.816904	663	706	2.848805	616
607	2.783189	716	657	2.817565	661	707	2.849419	614
608	2.783904	715	658	2.818226	661	708	2.850033	614
609	2.784617	713	659	2.818885	659	709	2.850646	613
		713			659			612
610	2.785330		660	2.819544		710	2.851258	
611	2.786041	711	661	2.820201	657	711	2.851870	612
612	2.786751	710	662	2.820858	657	712	2.852480	610
613	2.787460	709	663	2.821514	656	713	2.853090	610
614	2.788168	708	664	2.822168	654	714	2.853698	608
		707			654			608
615	2.788875		665	2.822822		715	2.854306	
616	2.789581	706	666	2.823474	652	716	2.854913	607
617	2.790285	704	667	2.824126	652	717	2.855519	606
618	2.790988	703	668	2.824776	650	718	2.856124	605
619	2.791691	703	669	2.825426	650	719	2.856729	605
		701			649			603
620	2.792392		670	2.826075		720	2.857332	
621	2.793092	700	671	2.826723	648	721	2.857935	603
622	2.793790	698	672	2.827369	646	722	2.858537	602
623	2.794488	698	673	2.828015	646	723	2.859138	601
624	2.795185	697	674	2.828660	645	724	2.859739	601
		695			644			599
625	2.795880		675	2.829304		725	2.860338	
626	2.796574	694	676	2.829947	643	726	2.860937	599
627	2.797268	694	677	2.830589	642	727	2.861534	597
628	2.797960	692	678	2.831230	641	728	2.862131	597
629	2.798651	691	679	2.831870	640	729	2.862728	597
		690			639			595
630	2.799341		680	2.832509		730	2.863323	
631	2.800029	688	681	2.833147	638	731	2.863917	594
632	2.800717	688	682	2.833784	637	732	2.864511	594
633	2.801404	687	683	2.834421	637	733	2.865104	593
634	2.802089	685	684	2.835056	635	734	2.865696	592
		685			635			591
635	2.802774		685	2.835691		735	2.866287	
636	2.803457	683	686	2.836324	633	736	2.866878	591
637	2.804139	682	687	2.836957	633	737	2.867467	589
638	2.804821	682	688	2.837588	631	738	2.868056	589
639	2.805501	680	689	2.838219	631	739	2.868644	588
		679			630			588
640	2.806180		690	2.838849		740	2.869232	
641	2.806858	678	691	2.839478	629	741	2.869818	586
642	2.807535	677	692	2.840106	628	742	2.870404	586
643	2.808211	676	693	2.840733	627	743	2.870989	585
644	2.808886	675	694	2.841359	626	744	2.871573	584
		674			626			583
645	2.809560		695	2.841985		745	2.872156	
646	2.810233	673	696	2.842609	624	746	2.872739	583
647	2.810904	671	697	2.843233	624	747	2.873321	582
648	2.811575	671	698	2.843855	622	748	2.873902	581
649	2.812245	670	699	2.844477	622	749	2.874482	580
650	2.812913	668	700	2.845098	621	750	2.875061	579

N.	0. 12' 30"	Dif.	N.	0. 13' 20"	Dif.	N.	0. 14' 10"	Dif.
	Logarith.			Logarith.			Logarith.	
750	2.875061	579	800	2.903090	543	850	2.929419	511
751	2.875640	578	801	2.903633	541	851	2.929930	510
752	2.876218	577	802	2.904174	542	852	2.930440	509
753	2.876795	576	803	2.904716	540	853	2.930949	509
754	2.877371	576	804	2.905256	540	854	2.931458	508
755	2.877947	575	805	2.905796	539	855	2.931966	508
756	2.878522	574	806	2.906335	539	856	2.932474	507
757	2.879096	573	807	2.906874	537	857	2.932981	506
758	2.879669	573	808	2.907411	538	858	2.933487	506
759	2.880242	572	809	2.907949	536	859	2.933993	505
760	2.880814	571	810	2.908485	536	860	2.934498	505
761	2.881385	570	811	2.909021	535	861	2.935003	504
762	2.881955	570	812	2.909556	535	862	2.935507	504
763	2.882525	568	813	2.910091	533	863	2.936011	503
764	2.883093	568	814	2.910624	534	864	2.936514	502
765	2.883661	568	815	2.911158	532	865	2.937016	502
766	2.884229	566	816	2.911690	532	866	2.937518	501
767	2.884795	566	817	2.912222	531	867	2.938019	501
768	2.885361	565	818	2.912753	531	868	2.938520	500
769	2.885926	565	819	2.913284	530	869	2.939020	499
770	2.886491	563	820	2.913814	529	870	2.939519	499
771	2.887054	563	821	2.914343	529	871	2.940018	498
772	2.887617	562	822	2.914872	528	872	2.940516	498
773	2.888179	562	823	2.915400	527	873	2.941014	497
774	2.888741	561	824	2.915927	527	874	2.941511	497
775	2.889302	560	825	2.916454	526	875	2.942008	496
776	2.889862	559	826	2.916980	526	876	2.942504	496
777	2.890421	559	827	2.917506	524	877	2.943000	495
778	2.890980	557	828	2.918030	525	878	2.943495	494
779	2.891537	558	829	2.918555	523	879	2.943989	494
780	2.892095	556	830	2.919078	523	880	2.944483	493
781	2.892651	556	831	2.919601	522	881	2.944976	493
782	2.893207	555	832	2.920123	522	882	2.945469	492
783	2.893762	554	833	2.920645	521	883	2.945961	491
784	2.894316	554	834	2.921166	520	884	2.946452	491
785	2.894870	553	835	2.921686	520	885	2.946943	491
786	2.895423	552	836	2.922206	519	886	2.947434	490
787	2.895975	551	837	2.922725	519	887	2.947924	489
788	2.896526	551	838	2.923244	518	888	2.948413	489
789	2.897077	550	839	2.923762	517	889	2.948902	488
790	2.897627	549	840	2.924279	517	890	2.949390	488
791	2.898176	549	841	2.924796	516	891	2.949878	487
792	2.898725	548	842	2.925312	516	892	2.950365	486
793	2.899273	548	843	2.925828	514	893	2.950851	487
794	2.899821	546	844	2.926342	515	894	2.951338	485
795	2.900367	546	845	2.926857	513	895	2.951823	485
796	2.900913	545	846	2.927370	513	896	2.952308	484
797	2.901458	545	847	2.927883	513	897	2.952792	484
798	2.902003	544	848	2.928396	512	898	2.953276	484
799	2.902547	543	849	2.928908	511	899	2.953760	483
800	2.903090		850	2.929419		900	2.954243	

N.	0. 15' 0"	Diff.	N.	0. 15' 50"	Diff.	N.	0. 16' 40"	Diff.
	Logarithm.			Logarithm.			Logarithm.	
900	2.954243	482	950	2.977724	457	1000	3.000000	434
901	2.954725	482	951	2.978181	456	1001	3.000434	434
902	2.955207	481	952	2.978637	456	1002	3.000868	433
903	2.955688	480	953	2.979093	455	1003	3.001301	433
904	2.956168	481	954	2.979548	455	1004	3.001734	432
905	2.956649	479	955	2.980003	455	1005	3.002166	432
906	2.957128	479	956	2.980458	454	1006	3.002598	431
907	2.957607	479	957	2.980912	454	1007	3.003029	432
908	2.958086	478	958	2.981366	453	1008	3.003461	430
909	2.958564	477	959	2.981819	452	1009	3.003891	430
910	2.959041	477	960	2.982271	452	1010	3.004321	430
911	2.959518	477	961	2.982723	452	1011	3.004751	430
912	2.959995	476	962	2.983175	451	1012	3.005181	428
913	2.960471	475	963	2.983626	451	1013	3.005609	429
914	2.960946	475	964	2.984077	450	1014	3.006038	428
915	2.961421	474	965	2.984527	450	1015	3.006466	428
916	2.961895	474	966	2.984977	449	1016	3.006894	427
917	2.962369	474	967	2.985426	449	1017	3.007321	427
918	2.962843	473	968	2.985875	449	1018	3.007748	426
919	2.963316	472	969	2.986324	448	1019	3.008174	426
920	2.963788	472	970	2.986772	447	1020	3.008600	426
921	2.964260	471	971	2.987219	447	1021	3.009026	425
922	2.964731	471	972	2.987666	447	1022	3.009451	425
923	2.965202	470	973	2.988113	446	1023	3.009876	424
924	2.965672	470	974	2.988559	446	1024	3.010300	424
925	2.966142	469	975	2.989005	445	1025	3.010724	423
926	2.966611	469	976	2.989450	445	1026	3.011147	423
927	2.967080	468	977	2.989895	444	1027	3.011570	423
928	2.967548	468	978	2.990339	444	1028	3.011993	422
929	2.968016	467	979	2.990783	443	1029	3.012415	422
930	2.968483	467	980	2.991226	443	1030	3.012837	422
931	2.968950	466	981	2.991669	442	1031	3.013259	421
932	2.969416	466	982	2.992111	443	1032	3.013680	420
933	2.969882	465	983	2.992554	441	1033	3.014100	421
934	2.970347	465	984	2.992995	441	1034	3.014521	419
935	2.970812	464	985	2.993436	441	1035	3.014940	420
936	2.971276	464	986	2.993877	440	1036	3.015360	419
937	2.971740	463	987	2.994317	440	1037	3.015779	418
938	2.972203	463	988	2.994757	439	1038	3.016197	419
939	2.972666	462	989	2.995196	439	1039	3.016616	417
940	2.973128	462	990	2.995635	439	1040	3.017033	418
941	2.973590	461	991	2.996074	438	1041	3.017451	417
942	2.974051	461	992	2.996512	437	1042	3.017868	416
943	2.974512	460	993	2.996949	437	1043	3.018284	416
944	2.974972	460	994	2.997386	437	1044	3.018700	416
945	2.975432	459	995	2.997823	436	1045	3.019116	416
946	2.975891	459	996	2.998259	436	1046	3.019532	415
947	2.976350	458	997	2.998695	436	1047	3.019947	414
948	2.976808	458	998	2.999131	434	1048	3.020361	414
949	2.977266	458	999	2.999565	435	1049	3.020775	414
950	2.977724		1000	3.000000		1050	3.021189	

Nomb.	0. 17° 30'	Dif.	Nomb.	0. 18° 20'	Dif.	Nomb.	0. 19° 10'	Dif.
1050	3.021189	414	1100	3.041303	394	1150	3.060698	377
1051	3.021603	413	1101	3.041787	395	1151	3.061075	377
1052	3.022016	412	1102	3.042182	394	1152	3.061452	377
1053	3.022428	413	1103	3.042576	393	1153	3.061829	377
1054	3.022841	411	1104	3.042969	393	1154	3.062206	376
1055	3.023252	412	1105	3.043362	393	1155	3.062582	376
1056	3.023664	411	1106	3.043755	393	1156	3.062958	375
1057	3.024075	411	1107	3.044148	392	1157	3.063333	376
1058	3.024486	410	1108	3.044540	392	1158	3.063709	374
1059	3.024896	410	1109	3.044932	391	1159	3.064083	375
1060	3.025306	409	1110	3.045323	391	1160	3.064458	374
1061	3.025715	410	1111	3.045714	391	1161	3.064832	374
1062	3.026125	408	1112	3.046105	390	1162	3.065206	374
1063	3.026533	409	1113	3.046495	390	1163	3.065580	373
1064	3.026942	408	1114	3.046885	390	1164	3.065953	373
1065	3.027350	407	1115	3.047275	389	1165	3.066326	373
1066	3.027757	407	1116	3.047664	389	1166	3.066699	372
1067	3.028164	407	1117	3.048053	389	1167	3.067071	372
1068	3.028571	406	1118	3.048442	388	1168	3.067443	372
1069	3.028978	406	1119	3.048830	388	1169	3.067815	371
1070	3.029384	405	1120	3.049218	388	1170	3.068186	371
1071	3.029789	406	1121	3.049606	387	1171	3.068557	371
1072	3.030195	405	1122	3.049993	387	1172	3.068928	370
1073	3.030600	404	1123	3.050380	386	1173	3.069298	370
1074	3.031004	404	1124	3.050766	387	1174	3.069668	370
1075	3.031408	404	1125	3.051153	385	1175	3.070038	369
1076	3.031812	404	1126	3.051538	386	1176	3.070407	369
1077	3.032216	403	1127	3.051924	385	1177	3.070776	369
1078	3.032619	402	1128	3.052309	385	1178	3.071145	369
1079	3.033021	403	1129	3.052694	384	1179	3.071514	368
1080	3.033424	402	1130	3.053078	385	1180	3.071882	368
1081	3.033826	401	1131	3.053463	383	1181	3.072250	367
1082	3.034227	401	1132	3.053846	384	1182	3.072617	368
1083	3.034628	401	1133	3.054230	383	1183	3.072985	367
1084	3.035029	401	1134	3.054613	383	1184	3.073352	366
1085	3.035430	400	1135	3.054996	382	1185	3.073718	367
1086	3.035830	400	1136	3.055378	382	1186	3.074085	366
1087	3.036230	399	1137	3.055760	382	1187	3.074451	365
1088	3.036629	399	1138	3.056142	382	1188	3.074816	366
1089	3.037028	398	1139	3.056524	381	1189	3.075182	365
1090	3.037426	399	1140	3.056905	381	1190	3.075547	365
1091	3.037825	398	1141	3.057286	380	1191	3.075912	364
1092	3.038223	397	1142	3.057666	380	1192	3.076276	364
1093	3.038620	397	1143	3.058046	380	1193	3.076640	364
1094	3.039017	397	1144	3.058426	379	1194	3.077004	364
1095	3.039414	397	1145	3.058805	380	1195	3.077368	363
1096	3.039811	396	1146	3.059185	378	1196	3.077731	363
1097	3.040207	395	1147	3.059563	379	1197	3.078094	363
1098	3.040602	396	1148	3.059942	378	1198	3.078457	362
1099	3.040998	395	1149	3.060320	378	1199	3.078819	362
1100	3.041393		1150	3.060698		1200	3.079181	

Nomb.	O. 20' 0"	Dif.	Nomb.	O. 20' 50"	Dif.	Nomb.	O. 21' 40"	Dif.
1200	3.079181	362	1250	3.096910	347	1300	3.113943	334
1201	3.079543	361	1251	3.097257	347	1301	3.114277	334
1202	3.079904	362	1252	3.097604	347	1302	3.114611	333
1203	3.080266	360	1253	3.097951	347	1303	3.114944	334
1204	3.080626	361	1254	3.098298	346	1304	3.115278	333
1205	3.080987	360	1255	3.098644	346	1305	3.115611	332
1206	3.081347	360	1256	3.098990	345	1306	3.115943	333
1207	3.081707	360	1257	3.099335	346	1307	3.116276	332
1208	3.082067	359	1258	3.099681	345	1308	3.116608	332
1209	3.082426	359	1259	3.100026	345	1309	3.116940	331
1210	3.082785	359	1260	3.100371	344	1310	3.117271	332
1211	3.083144	359	1261	3.100715	344	1311	3.117603	331
1212	3.083503	358	1262	3.101059	344	1312	3.117934	331
1213	3.083861	358	1263	3.101403	344	1313	3.118265	330
1214	3.084219	357	1264	3.101747	344	1314	3.118595	331
1215	3.084576	358	1265	3.102091	343	1315	3.118926	330
1216	3.084934	357	1266	3.102434	343	1316	3.119256	330
1217	3.085291	356	1267	3.102777	342	1317	3.119586	329
1218	3.085647	357	1268	3.103119	343	1318	3.119915	330
1219	3.086004	356	1269	3.103462	342	1319	3.120245	329
1220	3.086360	356	1270	3.103804	342	1320	3.120574	329
1221	3.086716	355	1271	3.104146	341	1321	3.120903	328
1222	3.087071	355	1272	3.104487	341	1322	3.121231	329
1223	3.087426	355	1273	3.104828	341	1323	3.121560	328
1224	3.087781	355	1274	3.105169	341	1324	3.121888	328
1225	3.088136	354	1275	3.105510	341	1325	3.122216	328
1226	3.088490	355	1276	3.105851	340	1326	3.122544	327
1227	3.088845	353	1277	3.106191	340	1327	3.122871	327
1228	3.089198	354	1278	3.106531	340	1328	3.123198	327
1229	3.089552	353	1279	3.106871	339	1329	3.123525	327
1230	3.089905	353	1280	3.107210	339	1330	3.123852	326
1231	3.090258	353	1281	3.107549	339	1331	3.124178	326
1232	3.090611	352	1282	3.107888	339	1332	3.124504	326
1233	3.090963	352	1283	3.108227	338	1333	3.124830	326
1234	3.091315	352	1284	3.108565	338	1334	3.125156	325
1235	3.091667	351	1285	3.108903	338	1335	3.125481	325
1236	3.092018	352	1286	3.109241	338	1336	3.125806	325
1237	3.092370	351	1287	3.109579	337	1337	3.126131	325
1238	3.092721	350	1288	3.109916	337	1338	3.126456	325
1239	3.093071	351	1289	3.110253	337	1339	3.126781	324
1240	3.093422	350	1290	3.110590	336	1340	3.127105	324
1241	3.093772	350	1291	3.110926	337	1341	3.127429	324
1242	3.094122	349	1292	3.111263	336	1342	3.127753	323
1243	3.094471	349	1293	3.111599	335	1343	3.128076	323
1244	3.094820	349	1294	3.111934	336	1344	3.128399	323
1245	3.095169	349	1295	3.112270	335	1345	3.128722	323
1246	3.095518	348	1296	3.112605	335	1346	3.129045	323
1247	3.095866	349	1297	3.112940	335	1347	3.129368	322
1248	3.096215	347	1298	3.113275	334	1348	3.129690	322
1249	3.096562	348	1299	3.113609	334	1349	3.130012	322
1250	3.096910		1300	3.113943		1350	3.130334	

Nomb.	O. 22' 30"	Dif.	Nomb.	O. 23' 20"	Dif.	Nomb.	O. 24' 10"	Dif.
1350	3.130334	321	1400	3.146128	310	1450	3.161368	299
1351	3.130655	322	1401	3.146438	310	1451	3.161667	300
1352	3.130977	321	1402	3.146748	310	1452	3.161967	299
1353	3.131298	321	1403	3.147058	309	1453	3.162266	298
1354	3.131619	320	1404	3.147367	309	1454	3.162564	299
1355	3.131939	321	1405	3.147676	309	1455	3.162863	298
1356	3.132260	320	1406	3.147985	309	1456	3.163161	299
1357	3.132580	320	1407	3.148294	309	1457	3.163460	298
1358	3.132900	319	1408	3.148603	308	1458	3.163758	297
1359	3.133219	320	1409	3.148911	308	1459	3.164055	298
1360	3.133539	319	1410	3.149219	308	1460	3.164353	297
1361	3.133858	319	1411	3.149527	308	1461	3.164650	297
1362	3.134177	319	1412	3.149835	307	1462	3.164947	297
1363	3.134496	318	1413	3.150142	307	1463	3.165244	297
1364	3.134814	319	1414	3.150449	307	1464	3.165541	297
1365	3.135133	318	1415	3.150756	307	1465	3.165838	296
1366	3.135451	318	1416	3.151063	307	1466	3.166134	296
1367	3.135769	317	1417	3.151370	306	1467	3.166430	296
1368	3.136086	317	1418	3.151676	306	1468	3.166726	296
1369	3.136403	318	1419	3.151982	306	1469	3.167022	295
1370	3.136721	316	1420	3.152288	306	1470	3.167317	296
1371	3.137037	317	1421	3.152594	306	1471	3.167613	295
1372	3.137354	317	1422	3.152900	305	1472	3.167908	295
1373	3.137671	316	1423	3.153205	305	1473	3.168203	294
1374	3.137987	316	1424	3.153510	305	1474	3.168497	295
1375	3.138303	315	1425	3.153815	305	1475	3.168792	294
1376	3.138618	315	1426	3.154120	304	1476	3.169086	294
1377	3.138933	316	1427	3.154424	304	1477	3.169380	294
1378	3.139249	315	1428	3.154728	304	1478	3.169674	294
1379	3.139564	315	1429	3.155032	304	1479	3.169968	294
1380	3.139879	315	1430	3.155336	304	1480	3.170262	293
1381	3.140194	314	1431	3.155640	303	1481	3.170555	293
1382	3.140508	314	1432	3.155943	303	1482	3.170848	293
1383	3.140822	314	1433	3.156246	303	1483	3.171141	293
1384	3.141136	314	1434	3.156549	303	1484	3.171434	292
1385	3.141450	313	1435	3.156852	302	1485	3.171726	293
1386	3.141763	313	1436	3.157154	303	1486	3.172019	292
1387	3.142076	313	1437	3.157457	302	1487	3.172311	292
1388	3.142389	313	1438	3.157759	302	1488	3.172603	292
1389	3.142702	313	1439	3.158061	301	1489	3.172895	291
1390	3.143015	312	1440	3.158362	302	1490	3.173186	292
1391	3.143327	312	1441	3.158664	301	1491	3.173478	291
1392	3.143639	312	1442	3.158965	301	1492	3.173769	291
1393	3.143951	312	1443	3.159266	301	1493	3.174060	291
1394	3.144263	311	1444	3.159567	301	1494	3.174351	290
1395	3.144574	311	1445	3.159868	300	1495	3.174641	291
1396	3.144885	311	1446	3.160168	301	1496	3.174932	290
1397	3.145196	311	1447	3.160468	300	1497	3.175222	290
1398	3.145507	311	1448	3.160769	299	1498	3.175512	290
1399	3.145818	310	1449	3.161068	300	1499	3.175802	289
1400	3.146128		1450	3.161368		1500	3.176091	

Nomb.	O. 25' 0"	Dif.	Nomb.	O. 25' 50"	Dif.	Nomb.	O. 26' 40"	Dif.
	Logarith.			Logarith.			Logarith.	
1500	3.176091	290	1550	3.190332	280	1600	3.204120	271
1501	3.176381	289	1551	3.190612	280	1601	3.204391	272
1502	3.176670	289	1552	3.190892	279	1602	3.204663	271
1503	3.176959	289	1553	3.191171	280	1603	3.204934	270
1504	3.177248	288	1554	3.191451	279	1604	3.205204	271
1505	3.177536	289	1555	3.191730	280	1605	3.205475	271
1506	3.177825	288	1556	3.192010	279	1606	3.205746	270
1507	3.178113	288	1557	3.192289	278	1607	3.206016	270
1508	3.178401	288	1558	3.192567	279	1608	3.206286	270
1509	3.178689	288	1559	3.192846	279	1609	3.206556	270
1510	3.178977	287	1560	3.193125	278	1610	3.206826	270
1511	3.179264	288	1561	3.193403	278	1611	3.207096	269
1512	3.179552	287	1562	3.193681	278	1612	3.207365	269
1513	3.179839	287	1563	3.193959	278	1613	3.207634	270
1514	3.180126	287	1564	3.194237	277	1614	3.207904	269
1515	3.180413	286	1565	3.194514	278	1615	3.208173	268
1516	3.180699	287	1566	3.194792	277	1616	3.208441	269
1517	3.180986	286	1567	3.195069	277	1617	3.208710	269
1518	3.181272	286	1568	3.195346	277	1618	3.208979	268
1519	3.181558	286	1569	3.195623	277	1619	3.209247	268
1520	3.181844	285	1570	3.195900	276	1620	3.209515	268
1521	3.182129	286	1571	3.196176	277	1621	3.209783	268
1522	3.182415	285	1572	3.196453	276	1622	3.210051	268
1523	3.182700	285	1573	3.196729	276	1623	3.210319	267
1524	3.182985	285	1574	3.197005	276	1624	3.210586	267
1525	3.183270	285	1575	3.197281	275	1625	3.210853	268
1526	3.183555	284	1576	3.197556	276	1626	3.211121	267
1527	3.183839	284	1577	3.197832	275	1627	3.211388	266
1528	3.184123	284	1578	3.198107	275	1628	3.211654	267
1529	3.184407	284	1579	3.198382	275	1629	3.211921	267
1530	3.184691	284	1580	3.198657	275	1630	3.212188	266
1531	3.184975	284	1581	3.198932	274	1631	3.212454	266
1532	3.185259	283	1582	3.199206	275	1632	3.212720	266
1533	3.185542	283	1583	3.199481	274	1633	3.212986	266
1534	3.185825	283	1584	3.199755	274	1634	3.213252	266
1535	3.186108	283	1585	3.200029	274	1635	3.213518	265
1536	3.186391	283	1586	3.200303	274	1636	3.213783	266
1537	3.186674	282	1587	3.200577	273	1637	3.214049	265
1538	3.186956	283	1588	3.200850	274	1638	3.214314	265
1539	3.187239	282	1589	3.201124	273	1639	3.214579	265
1540	3.187521	282	1590	3.201397	273	1640	3.214844	265
1541	3.187803	281	1591	3.201670	273	1641	3.215109	264
1542	3.188084	282	1592	3.201943	273	1642	3.215373	265
1543	3.188366	281	1593	3.202216	272	1643	3.215638	264
1544	3.188647	281	1594	3.202488	273	1644	3.215902	264
1545	3.188928	281	1595	3.202761	272	1645	3.216166	264
1546	3.189209	281	1596	3.203033	272	1646	3.216430	264
1547	3.189490	281	1597	3.203305	272	1647	3.216694	263
1548	3.189771	280	1598	3.203577	271	1648	3.216957	264
1549	3.190051	281	1599	3.203848	272	1649	3.217221	263
1550	3.190332		1600	3.204120		1650	3.217484	

Nomb.	α 27' 30"	Dif.	Nomb.	α 28' 20"	Dif.	Nomb.	α 29' 10"	Dif.
	Logarith.			Logarith.			Logarith.	
1650	3.217484	263	1700	3.230449	255	1750	3.243038	248
1651	3.217747	263	1701	3.230704	256	1751	3.243286	248
1652	3.218010	263	1702	3.230960	255	1752	3.243534	248
1653	3.218273	263	1703	3.231215	255	1753	3.243782	248
1654	3.218536	262	1704	3.231470	254	1754	3.244030	247
1655	3.218798	262	1705	3.231724	255	1755	3.244277	247
1656	3.219060	263	1706	3.231979	255	1756	3.244524	248
1657	3.219323	262	1707	3.232234	254	1757	3.244772	247
1658	3.219585	261	1708	3.232488	254	1758	3.245019	247
1659	3.219846	262	1709	3.232742	254	1759	3.245266	247
1660	3.220108	262	1710	3.232996	254	1760	3.245513	246
1661	3.220370	261	1711	3.233250	254	1761	3.245759	247
1662	3.220631	261	1712	3.233504	253	1762	3.246006	246
1663	3.220892	261	1713	3.233757	254	1763	3.246252	247
1664	3.221153	261	1714	3.234011	253	1764	3.246499	246
1665	3.221414	261	1715	3.234264	253	1765	3.246745	246
1666	3.221675	261	1716	3.234517	253	1766	3.246991	246
1667	3.221936	260	1717	3.234770	253	1767	3.247237	245
1668	3.222196	260	1718	3.235023	253	1768	3.247482	246
1669	3.222456	260	1719	3.235276	252	1769	3.247728	245
1670	3.222716	260	1720	3.235528	253	1770	3.247973	246
1671	3.222976	260	1721	3.235781	252	1771	3.248219	245
1672	3.223236	260	1722	3.236033	252	1772	3.248464	245
1673	3.223496	259	1723	3.236285	252	1773	3.248709	245
1674	3.223755	260	1724	3.236537	252	1774	3.248954	244
1675	3.224015	259	1725	3.236789	252	1775	3.249198	245
1676	3.224274	259	1726	3.237041	251	1776	3.249443	244
1677	3.224533	259	1727	3.237292	252	1777	3.249687	245
1678	3.224792	259	1728	3.237544	251	1778	3.249932	244
1679	3.225051	258	1729	3.237795	251	1779	3.250176	244
1680	3.225309	259	1730	3.238046	251	1780	3.250420	244
1681	3.225568	258	1731	3.238297	251	1781	3.250664	244
1682	3.225826	258	1732	3.238548	251	1782	3.250908	243
1683	3.226084	258	1733	3.238799	250	1783	3.251151	244
1684	3.226342	258	1734	3.239049	250	1784	3.251395	243
1685	3.226600	258	1735	3.239299	251	1785	3.251638	243
1686	3.226858	257	1736	3.239550	250	1786	3.251881	244
1687	3.227115	257	1737	3.239800	250	1787	3.252125	243
1688	3.227372	258	1738	3.240050	250	1788	3.252368	242
1689	3.227630	257	1739	3.240300	249	1789	3.252610	243
1690	3.227887	257	1740	3.240549	250	1790	3.252853	243
1691	3.228144	256	1741	3.240799	249	1791	3.253096	242
1692	3.228400	256	1742	3.241048	249	1792	3.253338	242
1693	3.228657	256	1743	3.241297	249	1793	3.253580	242
1694	3.228913	257	1744	3.241546	249	1794	3.253822	242
1695	3.229170	256	1745	3.241795	249	1795	3.254064	242
1696	3.229426	256	1746	3.242044	249	1796	3.254306	242
1697	3.229682	256	1747	3.242293	248	1797	3.254548	242
1698	3.229938	255	1748	3.242541	249	1798	3.254790	241
1699	3.230193	256	1749	3.242790	248	1799	3.255031	242
1700	3.230449		1750	3.243038		1800	3.255273	

Nomb.	0. 30' 0"	Dif.	Nomb.	0. 30' 50"	Dif.	Nomb.	0. 31' 40"	Dif.
	Logarith.			Logarith.			Logarith.	
1800	3.255273	241	1850	3.267172	234	1900	3.278754	228
1801	3.255514	241	1851	3.267406	235	1901	3.278982	229
1802	3.255755	241	1852	3.267641	234	1902	3.279211	228
1803	3.255996	240	1853	3.267875	235	1903	3.279439	228
1804	3.256236	241	1854	3.268110	234	1904	3.279667	228
1805	3.256477	241	1855	3.268344	234	1905	3.279895	228
1806	3.256718	240	1856	3.268578	234	1906	3.280123	228
1807	3.256958	240	1857	3.268812	234	1907	3.280351	227
1808	3.257198	241	1858	3.269046	233	1908	3.280578	228
1809	3.257439	240	1859	3.269279	234	1909	3.280806	227
1810	3.257679	239	1860	3.269513	233	1910	3.281033	228
1811	3.257918	240	1861	3.269746	234	1911	3.281261	227
1812	3.258158	240	1862	3.269980	233	1912	3.281488	227
1813	3.258398	239	1863	3.270213	233	1913	3.281715	227
1814	3.258637	240	1864	3.270446	233	1914	3.281942	227
1815	3.258877	239	1865	3.270679	233	1915	3.282169	227
1816	3.259116	239	1866	3.270912	232	1916	3.282396	226
1817	3.259355	239	1867	3.271144	233	1917	3.282622	227
1818	3.259594	239	1868	3.271377	232	1918	3.282849	226
1819	3.259833	238	1869	3.271609	233	1919	3.283075	226
1820	3.260071	239	1870	3.271842	232	1920	3.283301	226
1821	3.260310	238	1871	3.272074	232	1921	3.283527	226
1822	3.260548	239	1872	3.272306	232	1922	3.283753	226
1823	3.260787	238	1873	3.272538	232	1923	3.283979	226
1824	3.261025	238	1874	3.272770	231	1924	3.284205	226
1825	3.261263	238	1875	3.273001	232	1925	3.284431	225
1826	3.261501	238	1876	3.273233	231	1926	3.284656	226
1827	3.261739	237	1877	3.273464	232	1927	3.284882	225
1828	3.261976	237	1878	3.273696	231	1928	3.285107	225
1829	3.262214	237	1879	3.273927	231	1929	3.285332	225
1830	3.262451	237	1880	3.274158	231	1930	3.285557	225
1831	3.262688	237	1881	3.274389	231	1931	3.285782	225
1832	3.262925	237	1882	3.274620	230	1932	3.286007	225
1833	3.263162	237	1883	3.274850	231	1933	3.286232	224
1834	3.263399	237	1884	3.275081	230	1934	3.286456	225
1835	3.263636	237	1885	3.275311	231	1935	3.286681	224
1836	3.263873	236	1886	3.275542	230	1936	3.286905	225
1837	3.264109	237	1887	3.275772	230	1937	3.287130	224
1838	3.264346	236	1888	3.276002	230	1938	3.287354	224
1839	3.264582	236	1889	3.276232	230	1939	3.287578	224
1840	3.264818	236	1890	3.276462	230	1940	3.287802	224
1841	3.265054	236	1891	3.276692	229	1941	3.288026	223
1842	3.265290	235	1892	3.276921	230	1942	3.288249	224
1843	3.265525	236	1893	3.277151	229	1943	3.288473	223
1844	3.265761	235	1894	3.277380	229	1944	3.288696	224
1845	3.265996	236	1895	3.277609	229	1945	3.288920	223
1846	3.266232	235	1896	3.277838	229	1946	3.289143	223
1847	3.266467	235	1897	3.278067	229	1947	3.289366	223
1848	3.266702	235	1898	3.278296	229	1948	3.289589	223
1849	3.266937	235	1899	3.278525	229	1949	3.289812	223
1850	3.267172		1900	3.278754		1950	3.290035	

Nomb.	0. 32' 30"	Dif.	Nomb.	0. 33' 20"	Dif.	Nomb.	0. 34' 10"	Dif.
	Logarith.			Logarith.			Logarith.	
1950	3.290035	222	2000	3.301030	217	2050	3.311754	212
1951	3.290257	223	2001	3.301247	217	2051	3.311966	212
1952	3.290480	222	2002	3.301464	217	2052	3.312177	212
1953	3.290702	223	2003	3.301681	217	2053	3.312389	211
1954	3.290925	222	2004	3.301898	216	2054	3.312600	212
1955	3.291147	222	2005	3.302114	217	2055	3.312812	211
1956	3.291369	222	2006	3.302331	216	2056	3.313023	211
1957	3.291591	222	2007	3.302547	217	2057	3.313234	211
1958	3.291813	221	2008	3.302764	216	2058	3.313445	211
1959	3.292034	222	2009	3.302980	216	2059	3.313656	211
1960	3.292256	222	2010	3.303196	216	2060	3.313867	211
1961	3.292478	221	2011	3.303412	216	2061	3.314078	211
1962	3.292699	221	2012	3.303628	216	2062	3.314289	210
1963	3.292920	221	2013	3.303844	215	2063	3.314499	211
1964	3.293141	222	2014	3.304059	216	2064	3.314710	210
1965	3.293363	221	2015	3.304275	216	2065	3.314920	210
1966	3.293584	220	2016	3.304491	215	2066	3.315130	210
1967	3.293804	221	2017	3.304706	215	2067	3.315340	211
1968	3.294025	221	2018	3.304921	215	2068	3.315551	209
1969	3.294246	220	2019	3.305136	215	2069	3.315760	210
1970	3.294466	221	2020	3.305351	215	2070	3.315970	210
1971	3.294687	220	2021	3.305566	215	2071	3.316180	210
1972	3.294907	220	2022	3.305781	215	2072	3.316390	209
1973	3.295127	220	2023	3.305996	215	2073	3.316599	210
1974	3.295347	220	2024	3.306211	214	2074	3.316809	209
1975	3.295567	220	2025	3.306425	214	2075	3.317018	209
1976	3.295787	220	2026	3.306639	215	2076	3.317227	209
1977	3.296007	219	2027	3.306854	214	2077	3.317436	210
1978	3.296226	220	2028	3.307068	214	2078	3.317646	208
1979	3.296446	219	2029	3.307282	214	2079	3.317854	209
1980	3.296665	219	2030	3.307496	214	2080	3.318063	209
1981	3.296884	220	2031	3.307710	214	2081	3.318272	209
1982	3.297104	219	2032	3.307924	213	2082	3.318481	208
1983	3.297323	219	2033	3.308137	214	2083	3.318689	209
1984	3.297542	219	2034	3.308351	213	2084	3.318898	208
1985	3.297761	218	2035	3.308564	214	2085	3.319106	208
1986	3.297979	219	2036	3.308778	213	2086	3.319314	208
1987	3.298198	218	2037	3.308991	213	2087	3.319522	208
1988	3.298416	219	2038	3.309204	213	2088	3.319730	208
1989	3.298635	218	2039	3.309417	213	2089	3.319938	208
1990	3.298853	218	2040	3.309630	213	2090	3.320146	208
1991	3.299071	218	2041	3.309843	213	2091	3.320354	208
1992	3.299289	218	2042	3.310056	212	2092	3.320562	207
1993	3.299507	218	2043	3.310268	213	2093	3.320769	208
1994	3.299725	218	2044	3.310481	212	2094	3.320977	207
1995	3.299943	218	2045	3.310693	213	2095	3.321184	207
1996	3.300161	217	2046	3.310906	212	2096	3.321391	207
1997	3.300378	217	2047	3.311118	212	2097	3.321598	207
1998	3.300595	218	2048	3.311330	212	2098	3.321805	207
1999	3.300813	217	2049	3.311542	212	2099	3.322012	207
2000	3.301030	217	2050	3.311754	212	2100	3.322219	207

Nomb.	o. 35' 0"	Dif.	Nomb.	o. 35' 50"	Dif.	Nomb.	o. 36' 40"	Dif.
	Logarith.			Logarith.			Logarith.	
2100	3.322219		2150	3.332438		2200	3.342423	197
2101	3.322426	207	2151	3.332640	202	2201	3.342620	197
2102	3.322633	207	2152	3.332842	202	2202	3.342817	197
2103	3.322839	206	2153	3.333044	202	2203	3.343014	198
2104	3.323046	207	2154	3.333246	202	2204	3.343212	197
		206			201			197
2105	3.323252	206	2155	3.333447	202	2205	3.343409	197
2106	3.323458	207	2156	3.333649	201	2206	3.343606	196
2107	3.323665	206	2157	3.333850	201	2207	3.343802	197
2108	3.323871	206	2158	3.334051	202	2208	3.343999	197
2109	3.324077	205	2159	3.334253	201	2209	3.344196	196
		206			201			197
2110	3.324282	206	2160	3.334454	201	2210	3.344392	196
2111	3.324488	206	2161	3.334655	201	2211	3.344589	196
2112	3.324694	205	2162	3.334856	200	2212	3.344785	196
2113	3.324899	206	2163	3.335056	201	2213	3.344981	197
2114	3.325105	205	2164	3.335257	201	2214	3.345178	196
		205			200			196
2115	3.325310	206	2165	3.335458	201	2215	3.345374	196
2116	3.325516	205	2166	3.335658	201	2216	3.345570	196
2117	3.325721	205	2167	3.335859	200	2217	3.345766	196
2118	3.325926	205	2168	3.336059	201	2218	3.345962	195
2119	3.326131	205	2169	3.336260	200	2219	3.346157	196
		205			200			196
2120	3.326336	205	2170	3.336460	200	2220	3.346353	196
2121	3.326541	204	2171	3.336660	200	2221	3.346549	195
2122	3.326745	205	2172	3.336860	200	2222	3.346744	195
2123	3.326950	205	2173	3.337060	200	2223	3.346939	196
2124	3.327155	204	2174	3.337260	199	2224	3.347135	195
		204			200			195
2125	3.327359	204	2175	3.337459	200	2225	3.347330	195
2126	3.327563	204	2176	3.337659	199	2226	3.347525	195
2127	3.327767	205	2177	3.337858	200	2227	3.347720	195
2128	3.327972	204	2178	3.338058	199	2228	3.347915	195
2129	3.328176	204	2179	3.338257	199	2229	3.348110	195
		203			200			195
2130	3.328380	203	2180	3.338456	199	2230	3.348305	195
2131	3.328583	204	2181	3.338656	199	2231	3.348500	194
2132	3.328787	204	2182	3.338855	199	2232	3.348694	195
2133	3.328991	203	2183	3.339054	199	2233	3.348889	194
2134	3.329194	204	2184	3.339253	198	2234	3.349083	195
		203			199			194
2135	3.329398	203	2185	3.339451	199	2235	3.349278	194
2136	3.329601	204	2186	3.339650	199	2236	3.349472	194
2137	3.329805	203	2187	3.339849	198	2237	3.349666	194
2138	3.330008	203	2188	3.340047	199	2238	3.349860	194
2139	3.330211	203	2189	3.340246	198	2239	3.350054	194
		203			198			194
2140	3.330414	203	2190	3.340444	198	2240	3.350248	194
2141	3.330617	202	2191	3.340642	199	2241	3.350442	194
2142	3.330819	203	2192	3.340841	198	2242	3.350636	193
2143	3.331022	203	2193	3.341039	198	2243	3.350829	194
2144	3.331225	202	2194	3.341237	198	2244	3.351023	193
		203			197			194
2145	3.331427	202	2195	3.341435	198	2245	3.351216	194
2146	3.331630	202	2196	3.341632	197	2246	3.351410	193
2147	3.331832	202	2197	3.341830	198	2247	3.351603	193
2148	3.332034	202	2198	3.342028	197	2248	3.351796	193
2149	3.332236	202	2199	3.342225	198	2249	3.351989	194
2150	3.332438		2200	3.342423		2250	3.352183	

Nomb.	0. 37' 30"	Dif.	Nomb.	0. 38' 20"	Dif.	Nomb.	0. 39' 10"	Dif.
2250	3.352183	192	2300	3.361728	189	2350	3.371068	185
2251	3.352375	193	2301	3.361917	188	2351	3.371253	184
2252	3.352568	193	2302	3.362105	189	2352	3.371437	185
2253	3.352761	193	2303	3.362294	188	2353	3.371622	184
2254	3.352954	193	2304	3.362482	189	2354	3.371806	185
2255	3.353147	192	2305	3.362671	188	2355	3.371991	184
2256	3.353339	193	2306	3.362859	189	2356	3.372175	185
2257	3.353532	192	2307	3.363048	188	2357	3.372360	184
2258	3.353724	192	2308	3.363236	188	2358	3.372544	184
2259	3.353916	192	2309	3.363424	188	2359	3.372728	184
2260	3.354108	193	2310	3.363612	188	2360	3.372912	184
2261	3.354301	192	2311	3.363800	188	2361	3.373096	184
2262	3.354493	192	2312	3.363988	188	2362	3.373280	184
2263	3.354685	191	2313	3.364176	187	2363	3.373464	183
2264	3.354876	192	2314	3.364363	188	2364	3.373647	184
2265	3.355068	192	2315	3.364551	188	2365	3.373831	184
2266	3.355260	192	2316	3.364739	187	2366	3.374015	183
2267	3.355452	191	2317	3.364926	187	2367	3.374198	184
2268	3.355643	191	2318	3.365113	188	2368	3.374382	183
2269	3.355834	192	2319	3.365301	187	2369	3.374565	183
2270	3.356026	191	2320	3.365488	187	2370	3.374748	184
2271	3.356217	191	2321	3.365675	187	2371	3.374932	183
2272	3.356408	191	2322	3.365862	187	2372	3.375115	183
2273	3.356599	191	2323	3.366049	187	2373	3.375298	183
2274	3.356790	191	2324	3.366236	187	2374	3.375481	183
2275	3.356981	191	2325	3.366423	187	2375	3.375664	182
2276	3.357172	191	2326	3.366610	186	2376	3.375846	183
2277	3.357363	191	2327	3.366796	187	2377	3.376029	183
2278	3.357554	190	2328	3.366983	186	2378	3.376212	182
2279	3.357744	191	2329	3.367169	187	2379	3.376394	183
2280	3.357935	190	2330	3.367356	186	2380	3.376577	182
2281	3.358125	191	2331	3.367542	187	2381	3.376759	183
2282	3.358316	190	2332	3.367729	186	2382	3.376942	182
2283	3.358506	190	2333	3.367915	186	2383	3.377124	182
2284	3.358696	190	2334	3.368101	186	2384	3.377306	182
2285	3.358886	190	2335	3.368287	186	2385	3.377488	182
2286	3.359076	190	2336	3.368473	186	2386	3.377670	182
2287	3.359266	190	2337	3.368659	185	2387	3.377852	182
2288	3.359456	190	2338	3.368844	186	2388	3.378034	182
2289	3.359646	189	2339	3.369030	186	2389	3.378216	182
2290	3.359835	190	2340	3.369216	185	2390	3.378398	182
2291	3.360025	190	2341	3.369401	186	2391	3.378580	181
2292	3.360215	189	2342	3.369587	185	2392	3.378761	182
2293	3.360404	189	2343	3.369772	186	2393	3.378943	181
2294	3.360593	190	2344	3.369958	185	2394	3.379124	182
2295	3.360783	189	2345	3.370143	185	2395	3.379306	181
2296	3.360972	189	2346	3.370328	185	2396	3.379487	181
2297	3.361161	189	2347	3.370513	185	2397	3.379668	181
2298	3.361350	189	2348	3.370698	185	2398	3.379849	181
2299	3.361539	189	2349	3.370883	185	2399	3.380030	181
2300	3.361728		2350	3.371068		2400	3.380211	

Nomb.	O. 40' 0"	Dif.	Nomb.	O. 40' 50"	Dif.	Nomb.	O. 41' 40"	Dif.
	Logarith.			Logarith.			Logarith.	
2400	3.380211	181	2450	3.389166	177	2500	3.397940	174
2401	3.380392	181	2451	3.389343	177	2501	3.398114	173
2402	3.380573	181	2452	3.389520	177	2502	3.398287	174
2403	3.380754	180	2453	3.389698	177	2503	3.398461	173
2404	3.380934	181	2454	3.389875	176	2504	3.398634	174
2405	3.381115	181	2455	3.390051	177	2505	3.398808	173
2406	3.381296	180	2456	3.390228	177	2506	3.398981	173
2407	3.381476	180	2457	3.390405	177	2507	3.399154	174
2408	3.381656	181	2458	3.390582	177	2508	3.399328	173
2409	3.381837	180	2459	3.390759	176	2509	3.399501	173
2410	3.382017	180	2460	3.390935	177	2510	3.399674	173
2411	3.382197	180	2461	3.391112	176	2511	3.399847	173
2412	3.382377	180	2462	3.391288	176	2512	3.400020	172
2413	3.382557	180	2463	3.391464	177	2513	3.400192	173
2414	3.382737	180	2464	3.391641	176	2514	3.400365	173
2415	3.382917	180	2465	3.391817	176	2515	3.400538	173
2416	3.383097	180	2466	3.391993	176	2516	3.400711	172
2417	3.383277	179	2467	3.392169	176	2517	3.400883	173
2418	3.383456	180	2468	3.392345	176	2518	3.401056	172
2419	3.383636	179	2469	3.392521	176	2519	3.401228	173
2420	3.383815	180	2470	3.392697	176	2520	3.401401	172
2421	3.383995	179	2471	3.392873	175	2521	3.401573	172
2422	3.384174	179	2472	3.393048	176	2522	3.401745	172
2423	3.384353	180	2473	3.393224	176	2523	3.401917	172
2424	3.384533	179	2474	3.393400	175	2524	3.402089	172
2425	3.384712	179	2475	3.393575	176	2525	3.402261	172
2426	3.384891	179	2476	3.393751	175	2526	3.402433	172
2427	3.385070	179	2477	3.393926	175	2527	3.402605	172
2428	3.385249	179	2478	3.394101	176	2528	3.402777	172
2429	3.385428	178	2479	3.394277	175	2529	3.402949	172
2430	3.385606	179	2480	3.394452	175	2530	3.403121	171
2431	3.385785	179	2481	3.394627	175	2531	3.403292	172
2432	3.385964	178	2482	3.394802	175	2532	3.403464	171
2433	3.386142	179	2483	3.394977	175	2533	3.403635	172
2434	3.386321	178	2484	3.395152	174	2534	3.403807	171
2435	3.386499	178	2485	3.395326	175	2535	3.403978	171
2436	3.386677	179	2486	3.395501	175	2536	3.404149	171
2437	3.386856	178	2487	3.395676	174	2537	3.404320	172
2438	3.387034	178	2488	3.395850	175	2538	3.404492	171
2439	3.387212	178	2489	3.396025	174	2539	3.404663	171
2440	3.387390	178	2490	3.396199	175	2540	3.404834	171
2441	3.387568	178	2491	3.396374	174	2541	3.405005	171
2442	3.387746	177	2492	3.396548	174	2542	3.405176	170
2443	3.387923	178	2493	3.396722	174	2543	3.405346	171
2444	3.388101	178	2494	3.396896	175	2544	3.405517	171
2445	3.388279	177	2495	3.397071	174	2545	3.405688	170
2446	3.388456	178	2496	3.397245	174	2546	3.405858	171
2447	3.388634	177	2497	3.397419	173	2547	3.406029	170
2448	3.388811	178	2498	3.397592	174	2548	3.406199	171
2449	3.388989	177	2499	3.397766	174	2549	3.406370	170
2450	3.389166	177	2500	3.397940	174	2550	3.406540	170

Nomb.	o. 42' 30"	Dif.	Nomb.	o. 43' 20"	Dif.	Nomb.	o. 44' 10"	Dif.
2550	3.406540		2600	3.414973	167	2650	3.423246	164
2551	3.406710	170	2601	3.415140	167	2651	3.423410	164
2552	3.406881	171	2602	3.415307	167	2652	3.423574	163
2553	3.407051	170	2603	3.415474	167	2653	3.423737	164
2554	3.407221	170	2604	3.415641	167	2654	3.423901	164
		170			167			164
2555	3.407391	170	2605	3.415808	166	2655	3.424065	163
2556	3.407561	170	2606	3.415974	167	2656	3.424228	164
2557	3.407731	170	2607	3.416141	167	2657	3.424392	163
2558	3.407901	170	2608	3.416308	167	2658	3.424555	163
2559	3.408070	169	2609	3.416474	166	2659	3.424718	163
		170			167			164
2560	3.408240	170	2610	3.416641	166	2660	3.424882	163
2561	3.408410	170	2611	3.416807	166	2661	3.425045	163
2562	3.408579	169	2612	3.416973	166	2662	3.425208	163
2563	3.408749	170	2613	3.417139	166	2663	3.425371	163
2564	3.408918	169	2614	3.417306	167	2664	3.425534	163
		169			166			163
2565	3.409087	170	2615	3.417472	166	2665	3.425697	163
2566	3.409257	169	2616	3.417638	166	2666	3.425860	163
2567	3.409426	169	2617	3.417804	166	2667	3.426023	163
2568	3.409595	169	2618	3.417970	165	2668	3.426186	163
2569	3.409764	169	2619	3.418135	166	2669	3.426349	162
		169			166			162
2570	3.409933	169	2620	3.418301	166	2670	3.426511	163
2571	3.410102	169	2621	3.418467	166	2671	3.426674	162
2572	3.410271	169	2622	3.418633	165	2672	3.426836	163
2573	3.410440	169	2623	3.418798	166	2673	3.426999	162
2574	3.410609	168	2624	3.418964	165	2674	3.427161	163
		169			166			162
2575	3.410777	169	2625	3.419129	166	2675	3.427324	162
2576	3.410946	168	2626	3.419295	165	2676	3.427486	162
2577	3.411114	169	2627	3.419460	165	2677	3.427648	163
2578	3.411283	168	2628	3.419625	166	2678	3.427811	162
2579	3.411451	169	2629	3.419791	165	2679	3.427973	162
		168			165			162
2580	3.411620	168	2630	3.419956	165	2680	3.428135	162
2581	3.411788	168	2631	3.420121	165	2681	3.428297	162
2582	3.411956	168	2632	3.420286	165	2682	3.428459	162
2583	3.412124	169	2633	3.420451	165	2683	3.428621	162
2584	3.412293	168	2634	3.420616	165	2684	3.428783	161
		168			165			162
2585	3.412461	168	2635	3.420781	164	2685	3.428944	162
2586	3.412629	167	2636	3.420945	165	2686	3.429106	162
2587	3.412796	168	2637	3.421110	165	2687	3.429268	161
2588	3.412964	168	2638	3.421275	164	2688	3.429429	162
2589	3.413132	168	2639	3.421439	165	2689	3.429591	161
		168			165			161
2590	3.413300	167	2640	3.421604	164	2690	3.429752	162
2591	3.413467	168	2641	3.421768	165	2691	3.429914	161
2592	3.413635	168	2642	3.421933	164	2692	3.430075	161
2593	3.413803	167	2643	3.422097	164	2693	3.430236	162
2594	3.413970	167	2644	3.422261	165	2694	3.430398	161
		167			165			161
2595	3.414137	168	2645	3.422426	164	2695	3.430559	161
2596	3.414305	167	2646	3.422590	164	2696	3.430720	161
2597	3.414472	167	2647	3.422754	164	2697	3.430881	161
2598	3.414639	167	2648	3.422918	164	2698	3.431042	161
2599	3.414806	167	2649	3.423082	164	2699	3.431203	161
2600	3.414973	167	2650	3.423246	164	2700	3.431364	161

Nomb.	O. 45° 0'	Dif.	Nomb.	O. 45° 50'	Dif.	Nomb.	O. 46° 40'	Dif.
2700	3.431364	161	2750	3.439333	158	2800	3.447158	155
2701	3.431525	160	2751	3.439491	157	2801	3.447313	155
2702	3.431685	161	2752	3.439648	158	2802	3.447468	155
2703	3.431846	161	2753	3.439806	158	2803	3.447623	155
2704	3.432007	160	2754	3.439964	158	2804	3.447778	155
2705	3.432167	161	2755	3.440122	157	2805	3.447933	155
2706	3.432328	160	2756	3.440279	158	2806	3.448088	154
2707	3.432488	161	2757	3.440437	157	2807	3.448242	155
2708	3.432649	160	2758	3.440594	158	2808	3.448397	155
2709	3.432809	160	2759	3.440752	157	2809	3.448552	154
2710	3.432969	161	2760	3.440909	157	2810	3.448706	155
2711	3.433130	160	2761	3.441066	158	2811	3.448861	154
2712	3.433290	160	2762	3.441224	157	2812	3.449015	155
2713	3.433450	160	2763	3.441381	157	2813	3.449170	154
2714	3.433610	160	2764	3.441538	157	2814	3.449324	154
2715	3.433770	160	2765	3.441695	157	2815	3.449478	155
2716	3.433930	160	2766	3.441852	157	2816	3.449633	154
2717	3.434090	159	2767	3.442009	157	2817	3.449787	154
2718	3.434249	160	2768	3.442166	157	2818	3.449941	154
2719	3.434409	160	2769	3.442323	157	2819	3.450095	154
2720	3.434569	160	2770	3.442480	157	2820	3.450249	154
2721	3.434729	159	2771	3.442637	156	2821	3.450403	154
2722	3.434888	160	2772	3.442793	157	2822	3.450557	154
2723	3.435048	159	2773	3.442950	156	2823	3.450711	154
2724	3.435207	160	2774	3.443106	157	2824	3.450865	153
2725	3.435367	159	2775	3.443263	156	2825	3.451018	154
2726	3.435526	159	2776	3.443419	157	2826	3.451172	154
2727	3.435685	159	2777	3.443576	156	2827	3.451326	153
2728	3.435844	160	2778	3.443732	157	2828	3.451479	154
2729	3.436004	159	2779	3.443889	156	2829	3.451633	153
2730	3.436163	159	2780	3.444045	156	2830	3.451786	154
2731	3.436322	159	2781	3.444201	156	2831	3.451940	153
2732	3.436481	159	2782	3.444357	156	2832	3.452093	154
2733	3.436640	159	2783	3.444513	156	2833	3.452247	153
2734	3.436799	158	2784	3.444669	156	2834	3.452400	153
2735	3.436957	159	2785	3.444825	156	2835	3.452553	153
2736	3.437116	159	2786	3.444981	156	2836	3.452706	153
2737	3.437275	158	2787	3.445137	156	2837	3.452859	153
2738	3.437433	159	2788	3.445293	156	2838	3.453012	153
2739	3.437592	159	2789	3.445449	155	2839	3.453165	153
2740	3.437751	158	2790	3.445604	156	2840	3.453318	153
2741	3.437909	158	2791	3.445760	155	2841	3.453471	153
2742	3.438067	159	2792	3.445915	156	2842	3.453624	153
2743	3.438226	158	2793	3.446071	155	2843	3.453777	153
2744	3.438384	158	2794	3.446226	156	2844	3.453930	152
2745	3.438542	159	2795	3.446382	155	2845	3.454082	153
2746	3.438701	158	2796	3.446537	155	2846	3.454235	152
2747	3.438859	158	2797	3.446692	156	2847	3.454387	153
2748	3.439017	158	2798	3.446848	155	2848	3.454540	152
2749	3.439175	158	2799	3.447003	155	2849	3.454692	153
2750	3.439333		2800	3.447158		2850	3.454845	

Nomb.	0. 47° 30'	Dif.	Nomb.	0. 48° 20'	Dif.	Nomb.	0. 49° 10'	Dif.
2850	3.454845	152	2900	3.462398	150	2950	3.469822	147
2851	3.454997	153	2901	3.462548	149	2951	3.469969	147
2852	3.455150	152	2902	3.462697	150	2952	3.470116	147
2853	3.455302	152	2903	3.462847	150	2953	3.470263	147
2854	3.455454	152	2904	3.462997	149	2954	3.470410	147
2855	3.455606	152	2905	3.463146	150	2955	3.470557	147
2856	3.455758	152	2906	3.463296	149	2956	3.470704	147
2857	3.455910	152	2907	3.463445	149	2957	3.470851	147
2858	3.456062	152	2908	3.463594	150	2958	3.470998	147
2859	3.456214	152	2909	3.463744	149	2959	3.471145	147
2860	3.456366	152	2910	3.463893	149	2960	3.471292	146
2861	3.456518	152	2911	3.464042	149	2961	3.471438	147
2862	3.456670	151	2912	3.464191	149	2962	3.471585	147
2863	3.456821	152	2913	3.464340	149	2963	3.471732	146
2864	3.456973	152	2914	3.464490	149	2964	3.471878	147
2865	3.457125	151	2915	3.464639	149	2965	3.472025	146
2866	3.457276	152	2916	3.464788	148	2966	3.472171	147
2867	3.457428	151	2917	3.464936	149	2967	3.472318	146
2868	3.457579	152	2918	3.465085	149	2968	3.472464	146
2869	3.457731	151	2919	3.465234	149	2969	3.472610	146
2870	3.457882	151	2920	3.465383	149	2970	3.472756	147
2871	3.458033	151	2921	3.465532	148	2971	3.472903	146
2872	3.458184	152	2922	3.465680	149	2972	3.473049	146
2873	3.458336	151	2923	3.465829	148	2973	3.473195	146
2874	3.458487	151	2924	3.465977	149	2974	3.473341	146
2875	3.458638	151	2925	3.466126	148	2975	3.473487	146
2876	3.458789	151	2926	3.466274	149	2976	3.473633	146
2877	3.458940	151	2927	3.466423	148	2977	3.473779	146
2878	3.459091	151	2928	3.466571	148	2978	3.473925	146
2879	3.459242	150	2929	3.466719	149	2979	3.474071	145
2880	3.459392	151	2930	3.466868	148	2980	3.474216	146
2881	3.459543	151	2931	3.467016	148	2981	3.474362	146
2882	3.459694	151	2932	3.467164	148	2982	3.474508	145
2883	3.459845	150	2933	3.467312	148	2983	3.474653	146
2884	3.459995	151	2934	3.467460	148	2984	3.474799	145
2885	3.460146	150	2935	3.467608	148	2985	3.474944	146
2886	3.460296	151	2936	3.467756	148	2986	3.475090	145
2887	3.460447	150	2937	3.467904	148	2987	3.475235	146
2888	3.460597	151	2938	3.468052	148	2988	3.475381	145
2889	3.460748	150	2939	3.468200	147	2989	3.475526	145
2890	3.460898	150	2940	3.468347	148	2990	3.475671	145
2891	3.461048	150	2941	3.468495	148	2991	3.475816	146
2892	3.461198	150	2942	3.468643	147	2992	3.475962	145
2893	3.461348	151	2943	3.468790	148	2993	3.476107	145
2894	3.461499	150	2944	3.468938	147	2994	3.476252	145
2895	3.461649	150	2945	3.469085	148	2995	3.476397	145
2896	3.461799	149	2946	3.469233	147	2996	3.476542	145
2897	3.461948	150	2947	3.469380	147	2997	3.476687	145
2898	3.462098	150	2948	3.469527	148	2998	3.476832	144
2899	3.462248	150	2949	3.469675	147	2999	3.476976	145
2900	3.462398		2950	3.469822	147	3000	3.477121	

Nomb.	0. 50' 0"	Dif.	Nomb.	0. 50' 50"	Dif.	Nomb.	0. 51' 40"	Dif.
Logarith.			Logarith.			Logarith.		
3000	3.477121	145	3050	3.484300	142	3100	3.491362	140
3001	3.477266	145	3051	3.484442	142	3101	3.491502	140
3002	3.477411	144	3052	3.484584	143	3102	3.491642	140
3003	3.477555	145	3053	3.484727	142	3103	3.491782	140
3004	3.477700	144	3054	3.484869	142	3104	3.491922	140
3005	3.477844	145	3055	3.485011	142	3105	3.492062	139
3006	3.477989	144	3056	3.485153	142	3106	3.492201	140
3007	3.478133	145	3057	3.485295	142	3107	3.492341	140
3008	3.478278	144	3058	3.485437	142	3108	3.492481	140
3009	3.478422	144	3059	3.485579	142	3109	3.492621	139
3010	3.478566	145	3060	3.485721	142	3110	3.492760	140
3011	3.478711	144	3061	3.485863	142	3111	3.492900	140
3012	3.478855	144	3062	3.486005	142	3112	3.493040	139
3013	3.478999	144	3063	3.486147	142	3113	3.493179	140
3014	3.479143	144	3064	3.486289	141	3114	3.493319	139
3015	3.479287	144	3065	3.486430	142	3115	3.493458	139
3016	3.479431	144	3066	3.486572	142	3116	3.493597	140
3017	3.479575	144	3067	3.486714	141	3117	3.493737	139
3018	3.479719	144	3068	3.486855	142	3118	3.493876	139
3019	3.479863	144	3069	3.486997	141	3119	3.494015	140
3020	3.480007	144	3070	3.487138	142	3120	3.494155	139
3021	3.480151	143	3071	3.487280	141	3121	3.494294	139
3022	3.480294	144	3072	3.487421	142	3122	3.494433	139
3023	3.480438	144	3073	3.487563	141	3123	3.494572	139
3024	3.480582	143	3074	3.487704	141	3124	3.494711	139
3025	3.480725	144	3075	3.487845	141	3125	3.494850	139
3026	3.480869	143	3076	3.487986	141	3126	3.494989	139
3027	3.481012	144	3077	3.488127	142	3127	3.495128	139
3028	3.481156	143	3078	3.488269	141	3128	3.495267	139
3029	3.481299	144	3079	3.488410	141	3129	3.495406	138
3030	3.481443	143	3080	3.488551	141	3130	3.495544	139
3031	3.481586	143	3081	3.488692	141	3131	3.495683	139
3032	3.481729	143	3082	3.488833	140	3132	3.495822	138
3033	3.481872	144	3083	3.488973	141	3133	3.495960	139
3034	3.482016	143	3084	3.489114	141	3134	3.496099	139
3035	3.482159	143	3085	3.489255	141	3135	3.496238	138
3036	3.482302	143	3086	3.489396	141	3136	3.496376	138
3037	3.482445	143	3087	3.489537	140	3137	3.496514	139
3038	3.482588	143	3088	3.489677	141	3138	3.496653	138
3039	3.482731	143	3089	3.489818	140	3139	3.496791	139
3040	3.482874	142	3090	3.489958	141	3140	3.496930	138
3041	3.483016	143	3091	3.490099	140	3141	3.497068	138
3042	3.483159	143	3092	3.490239	141	3142	3.497206	138
3043	3.483302	143	3093	3.490380	140	3143	3.497344	139
3044	3.483445	142	3094	3.490520	141	3144	3.497483	138
3045	3.483587	143	3095	3.490661	140	3145	3.497621	138
3046	3.483730	142	3096	3.490801	140	3146	3.497759	138
3047	3.483872	143	3097	3.490941	140	3147	3.497897	138
3048	3.484015	142	3098	3.491081	141	3148	3.498035	138
3049	3.484157	143	3099	3.491222	140	3149	3.498173	138
3050	3.484300	143	3100	3.491362	140	3150	3.498311	138

Nomb.	0. 52' 30"	Dif.	Nomb.	0. 53' 20"	Dif.	Nomb.	0. 54' 10"	Dif.
	Logarith.			Logarith.			Logarith.	
3150	3.498311	137	3200	3.505150	136	3250	3.511883	134
3151	3.498448	138	3201	3.505286	135	3251	3.512017	134
3152	3.498586	138	3202	3.505421	136	3252	3.512151	133
3153	3.498724	138	3203	3.505557	136	3253	3.512284	134
3154	3.498862	137	3204	3.505693	135	3254	3.512418	133
3155	3.498999	138	3205	3.505828	136	3255	3.512551	133
3156	3.499137	138	3206	3.505964	135	3256	3.512684	134
3157	3.499275	137	3207	3.506099	135	3257	3.512818	133
3158	3.499412	138	3208	3.506234	136	3258	3.512951	133
3159	3.499550	137	3209	3.506370	135	3259	3.513084	134
3160	3.499687	137	3210	3.506505	135	3260	3.513218	133
3161	3.499824	138	3211	3.506640	136	3261	3.513351	133
3162	3.499962	137	3212	3.506776	135	3262	3.513484	133
3163	3.500099	137	3213	3.506911	135	3263	3.513617	133
3164	3.500236	138	3214	3.507046	135	3264	3.513750	133
3165	3.500374	137	3215	3.507181	135	3265	3.513883	133
3166	3.500511	137	3216	3.507316	135	3266	3.514016	133
3167	3.500648	137	3217	3.507451	135	3267	3.514149	133
3168	3.500785	137	3218	3.507586	135	3268	3.514282	133
3169	3.500922	137	3219	3.507721	135	3269	3.514415	133
3170	3.501059	137	3220	3.507856	135	3270	3.514548	132
3171	3.501196	137	3221	3.507991	135	3271	3.514680	133
3172	3.501333	137	3222	3.508126	134	3272	3.514813	133
3173	3.501470	137	3223	3.508260	135	3273	3.514946	133
3174	3.501607	137	3224	3.508395	135	3274	3.515079	132
3175	3.501744	136	3225	3.508530	134	3275	3.515211	133
3176	3.501880	137	3226	3.508664	135	3276	3.515344	132
3177	3.502017	137	3227	3.508799	135	3277	3.515476	133
3178	3.502154	137	3228	3.508934	134	3278	3.515609	132
3179	3.502291	136	3229	3.509068	135	3279	3.515741	133
3180	3.502427	137	3230	3.509203	134	3280	3.515874	132
3181	3.502564	136	3231	3.509337	134	3281	3.516006	133
3182	3.502700	137	3232	3.509471	135	3282	3.516139	132
3183	3.502837	136	3233	3.509606	134	3283	3.516271	132
3184	3.502973	136	3234	3.509740	134	3284	3.516403	132
3185	3.503109	137	3235	3.509874	135	3285	3.516535	133
3186	3.503246	136	3236	3.510009	134	3286	3.516668	132
3187	3.503382	136	3237	3.510143	134	3287	3.516800	132
3188	3.503518	137	3238	3.510277	134	3288	3.516932	132
3189	3.503655	136	3239	3.510411	134	3289	3.517064	132
3190	3.503791	136	3240	3.510545	134	3290	3.517196	132
3191	3.503927	136	3241	3.510679	134	3291	3.517328	132
3192	3.504063	136	3242	3.510813	134	3292	3.517460	132
3193	3.504199	136	3243	3.510947	134	3293	3.517592	132
3194	3.504335	136	3244	3.511081	134	3294	3.517724	131
3195	3.504471	136	3245	3.511215	134	3295	3.517855	132
3196	3.504607	136	3246	3.511349	133	3296	3.517987	132
3197	3.504743	135	3247	3.511482	134	3297	3.518119	132
3198	3.504878	136	3248	3.511616	134	3298	3.518251	131
3199	3.505014	136	3249	3.511750	133	3299	3.518382	132
3200	3.505150	136	3250	3.511883	133	3300	3.518514	132

Nomb.	0. 55' 0"	Dif.	Nomb.	0. 55' 50"	Dif.	Nomb.	0. 56' 40"	Dif.
	Logarith.			Logarith.			Logarith.	
3300	3.518514		3350	3.525045		3400	3.531479	128
3301	3.518646	132	3351	3.525174	129	3401	3.531607	127
3302	3.518777	131	3352	3.525304	130	3402	3.531734	128
3303	3.518909	132	3353	3.525434	130	3403	3.531862	128
3304	3.519040	131	3354	3.525563	129	3404	3.531990	127
		131			130			127
3305	3.519171	132	3355	3.525693	129	3405	3.532117	128
3306	3.519303	131	3356	3.525822	129	3406	3.532245	127
3307	3.519434	131	3357	3.525951	130	3407	3.532372	128
3308	3.519565	132	3358	3.526081	129	3408	3.532500	127
3309	3.519697	131	3359	3.526210	129	3409	3.532627	127
		131			129			127
3310	3.519828	131	3360	3.526339	130	3410	3.532754	128
3311	3.519959	131	3361	3.526469	129	3411	3.532882	127
3312	3.520090	131	3362	3.526598	129	3412	3.533009	127
3313	3.520221	132	3363	3.526727	129	3413	3.533136	128
3314	3.520353	132	3364	3.526856	129	3414	3.533264	127
		131			129			127
3315	3.520484	131	3365	3.526985	129	3415	3.533391	127
3316	3.520615	130	3366	3.527114	129	3416	3.533518	127
3317	3.520745	131	3367	3.527243	129	3417	3.533645	127
3318	3.520876	131	3368	3.527372	129	3418	3.533772	127
3319	3.521007	131	3369	3.527501	129	3419	3.533899	127
		131			129			127
3320	3.521138	131	3370	3.527630	129	3420	3.534026	127
3321	3.521269	131	3371	3.527759	129	3421	3.534153	127
3322	3.521400	130	3372	3.527888	128	3422	3.534280	127
3323	3.521530	131	3373	3.528016	129	3423	3.534407	127
3324	3.521661	131	3374	3.528145	129	3424	3.534534	127
		131			129			127
3325	3.521792	130	3375	3.528274	128	3425	3.534661	126
3326	3.521922	131	3376	3.528402	129	3426	3.534787	127
3327	3.522053	130	3377	3.528531	129	3427	3.534914	127
3328	3.522183	131	3378	3.528660	128	3428	3.535041	126
3329	3.522314	130	3379	3.528788	129	3429	3.535167	127
		131			128			127
3330	3.522444	131	3380	3.528917	129	3430	3.535294	127
3331	3.522575	130	3381	3.529045	129	3431	3.535421	126
3332	3.522705	130	3382	3.529174	128	3432	3.535547	127
3333	3.522835	131	3383	3.529302	128	3433	3.535674	126
3334	3.522966	130	3384	3.529430	129	3434	3.535800	127
		130			128			126
3335	3.523096	130	3385	3.529559	128	3435	3.535927	126
3336	3.523226	130	3386	3.529687	128	3436	3.536053	127
3337	3.523356	130	3387	3.529815	128	3437	3.536180	126
3338	3.523486	130	3388	3.529943	129	3438	3.536306	126
3339	3.523616	130	3389	3.530072	128	3439	3.536432	126
		130			128			126
3340	3.523746	130	3390	3.530200	128	3440	3.536558	127
3341	3.523876	130	3391	3.530328	128	3441	3.536685	126
3342	3.524006	130	3392	3.530456	128	3442	3.536811	126
3343	3.524136	130	3393	3.530584	128	3443	3.536937	126
3344	3.524266	130	3394	3.530712	128	3444	3.537063	126
		130			128			126
3345	3.524396	130	3395	3.530840	128	3445	3.537189	126
3346	3.524526	130	3396	3.530968	128	3446	3.537315	126
3347	3.524656	129	3397	3.531096	127	3447	3.537441	126
3348	3.524785	130	3398	3.531223	128	3448	3.537567	126
3349	3.524915	130	3399	3.531351	128	3449	3.537693	126
3350	3.525045	130	3400	3.531479	128	3450	3.537819	126

Nomb.	0. 57' 30"	Dif.	Nomb.	0. 58' 20"	Dif.	Nomb.	0. 59' 10"	Dif.
3450	3.537819	126	3500	3.544068	124	3550	3.550228	123
3451	3.537945	126	3501	3.544192	124	3551	3.550351	122
3452	3.538071	126	3502	3.544316	124	3552	3.550473	122
3453	3.538197	125	3503	3.544440	124	3553	3.550595	122
3454	3.538322	126	3504	3.544564	124	3554	3.550717	123
3455	3.538448	126	3505	3.544688	124	3555	3.550840	122
3456	3.538574	125	3506	3.544812	124	3556	3.550962	122
3457	3.538699	126	3507	3.544936	124	3557	3.551084	122
3458	3.538825	126	3508	3.545060	123	3558	3.551206	122
3459	3.538951	125	3509	3.545183	124	3559	3.551328	122
3460	3.539076	126	3510	3.545307	124	3560	3.551450	122
3461	3.539202	125	3511	3.545431	124	3561	3.551572	122
3462	3.539327	125	3512	3.545555	123	3562	3.551694	122
3463	3.539452	126	3513	3.545678	124	3563	3.551816	122
3464	3.539578	125	3514	3.545802	123	3564	3.551938	122
3465	3.539703	126	3515	3.545925	124	3565	3.552060	121
3466	3.539829	125	3516	3.546049	123	3566	3.552181	122
3467	3.539954	125	3517	3.546172	124	3567	3.552303	122
3468	3.540079	125	3518	3.546296	123	3568	3.552425	122
3469	3.540204	125	3519	3.546419	124	3569	3.552547	121
3470	3.540329	126	3520	3.546543	123	3570	3.552668	122
3471	3.540455	125	3521	3.546666	123	3571	3.552790	121
3472	3.540580	125	3522	3.546789	124	3572	3.552911	122
3473	3.540705	125	3523	3.546913	123	3573	3.553033	122
3474	3.540830	125	3524	3.547036	123	3574	3.553155	121
3475	3.540955	125	3525	3.547159	123	3575	3.553276	122
3476	3.541080	125	3526	3.547282	123	3576	3.553398	122
3477	3.541205	125	3527	3.547405	124	3577	3.553519	121
3478	3.541330	124	3528	3.547529	123	3578	3.553640	122
3479	3.541454	125	3529	3.547652	123	3579	3.553762	121
3480	3.541579	125	3530	3.547775	123	3580	3.553883	121
3481	3.541704	125	3531	3.547898	123	3581	3.554004	122
3482	3.541829	124	3532	3.548021	123	3582	3.554126	121
3483	3.541953	125	3533	3.548144	123	3583	3.554247	121
3484	3.542078	125	3534	3.548267	122	3584	3.554368	121
3485	3.542203	124	3535	3.548389	123	3585	3.554489	121
3486	3.542327	125	3536	3.548512	123	3586	3.554610	121
3487	3.542452	124	3537	3.548635	123	3587	3.554731	121
3488	3.542576	125	3538	3.548758	123	3588	3.554852	121
3489	3.542701	124	3539	3.548881	122	3589	3.554973	121
3490	3.542825	125	3540	3.549003	123	3590	3.555094	121
3491	3.542950	124	3541	3.549126	123	3591	3.555215	121
3492	3.543074	125	3542	3.549249	122	3592	3.555336	121
3493	3.543199	124	3543	3.549371	123	3593	3.555457	121
3494	3.543323	124	3544	3.549494	121	3594	3.555578	121
3495	3.543447	124	3545	3.549616	123	3595	3.555699	121
3496	3.543571	125	3546	3.549739	122	3596	3.555820	20
3497	3.543696	124	3547	3.549861	123	3597	3.555940	121
3498	3.543820	124	3548	3.549984	122	3598	3.556061	121
3499	3.543944	124	3549	3.550106	122	3599	3.556182	121
3500	3.544068	124	3550	3.550228	122	3600	3.556303	121

Nomb.	1. 0' 0"	Dif.	Nomb.	1. 0' 50"	Dif.	Nomb.	1. 1' 40"	Dif.
3600	3.556303		3650	3.562293		3700	3.568202	117
3601	3.556423	120	3651	3.562412	119	3701	3.568319	117
3602	3.556544	121	3652	3.562531	119	3702	3.568436	118
3603	3.556664	120	3653	3.562650	119	3703	3.568554	117
3604	3.556783	121	3654	3.562769	119	3704	3.568671	117
		120			118			117
3605	3.556905	121	3655	3.562887	119	3705	3.568788	117
3606	3.557026	120	3656	3.563006	119	3706	3.568905	118
3607	3.557146	121	3657	3.563125	119	3707	3.569023	117
3608	3.557267	120	3658	3.563244	118	3708	3.569140	117
3609	3.557387	120	3659	3.563362	119	3709	3.569257	117
		120			119			117
3610	3.557507	121	3660	3.563481	119	3710	3.569374	117
3611	3.557627	120	3661	3.563600	118	3711	3.569491	117
3612	3.557748	121	3662	3.563718	119	3712	3.569608	117
3613	3.557868	120	3663	3.563837	118	3713	3.569725	117
3614	3.557988	120	3664	3.563955	119	3714	3.569842	117
		120			118			117
3615	3.558108	121	3665	3.564074	118	3715	3.569959	117
3616	3.558228	120	3666	3.564192	119	3716	3.570076	117
3617	3.558349	121	3667	3.564311	118	3717	3.570193	116
3618	3.558469	120	3668	3.564429	119	3718	3.570309	117
3619	3.558589	120	3669	3.564548	118	3719	3.570426	117
		120			118			117
3620	3.558709	121	3670	3.564666	118	3720	3.570543	117
3621	3.558829	119	3671	3.564784	119	3721	3.570660	116
3622	3.558948	120	3672	3.564903	118	3722	3.570776	117
3623	3.559068	120	3673	3.565021	118	3723	3.570893	117
3624	3.559188	120	3674	3.565139	118	3724	3.571010	116
		120			118			116
3625	3.559308	121	3675	3.565257	119	3725	3.571126	117
3626	3.559428	120	3676	3.565376	118	3726	3.571243	116
3627	3.559548	120	3677	3.565494	118	3727	3.571359	117
3628	3.559667	119	3678	3.565612	118	3728	3.571476	116
3629	3.559787	120	3679	3.565730	118	3729	3.571592	117
		120			118			117
3630	3.559907	119	3680	3.565848	118	3730	3.571709	116
3631	3.560026	120	3681	3.565966	118	3731	3.571825	117
3632	3.560146	119	3682	3.566084	118	3732	3.571942	116
3633	3.560265	119	3683	3.566202	118	3733	3.572058	116
3634	3.560385	120	3684	3.566320	117	3734	3.572174	117
		119			118			116
3635	3.560504	120	3685	3.566437	118	3735	3.572291	116
3636	3.560624	119	3686	3.566555	118	3736	3.572407	116
3637	3.560743	120	3687	3.566673	118	3737	3.572523	116
3638	3.560863	119	3688	3.566791	118	3738	3.572639	116
3639	3.560982	119	3689	3.566909	117	3739	3.572755	117
		119			118			116
3640	3.561101	120	3690	3.567026	118	3740	3.572872	116
3641	3.561221	119	3691	3.567144	118	3741	3.572988	116
3642	3.561340	119	3692	3.567262	117	3742	3.573104	116
3643	3.561459	119	3693	3.567379	117	3743	3.573220	116
3644	3.561578	120	3694	3.567497	117	3744	3.573336	116
		120			117			116
3645	3.561698	119	3695	3.567614	118	3745	3.573452	116
3646	3.561817	119	3696	3.567732	117	3746	3.573568	116
3647	3.561936	119	3697	3.567849	118	3747	3.573684	116
3648	3.562055	119	3698	3.567967	117	3748	3.573800	115
3649	3.562174	119	3699	3.568084	118	3749	3.573915	116
3650	3.562293	119	3700	3.568202	118	3750	3.574031	116

Nomb.	1. 2' 30"	Dif.	Nomb.	1. 3' 20"	Dif.	Nomb.	1. 4' 10"	Dif.
3750	3.574031	116	3800	3.579784	114	3850	3.585461	113
3751	3.574147	116	3801	3.579898	114	3851	3.585574	112
3752	3.574263	116	3802	3.580012	114	3852	3.585686	113
3753	3.574379	115	3803	3.580126	114	3853	3.585799	113
3754	3.574494	116	3804	3.580241	114	3854	3.585912	112
3755	3.574610	116	3805	3.580355	114	3855	3.586024	113
3756	3.574726	115	3806	3.580469	114	3856	3.586137	113
3757	3.574841	116	3807	3.580583	114	3857	3.586250	112
3758	3.574957	115	3808	3.580697	114	3858	3.586362	113
3759	3.575072	116	3809	3.580811	114	3859	3.586475	112
3760	3.575188	115	3810	3.580925	114	3860	3.586587	113
3761	3.575303	116	3811	3.581039	114	3861	3.586700	112
3762	3.575419	115	3812	3.581153	114	3862	3.586812	113
3763	3.575534	116	3813	3.581267	114	3863	3.586925	112
3764	3.575650	115	3814	3.581381	114	3864	3.587037	112
3765	3.575765	115	3815	3.581495	113	3865	3.587149	113
3766	3.575880	116	3816	3.581608	114	3866	3.587262	112
3767	3.575996	115	3817	3.581722	114	3867	3.587374	112
3768	3.576111	115	3818	3.581836	114	3868	3.587486	113
3769	3.576226	115	3819	3.581950	113	3869	3.587599	112
3770	3.576341	116	3820	3.582063	114	3870	3.587711	112
3771	3.576457	115	3821	3.582177	114	3871	3.587823	112
3772	3.576572	115	3822	3.582291	113	3872	3.587935	112
3773	3.576687	115	3823	3.582404	114	3873	3.588047	113
3774	3.576802	115	3824	3.582518	113	3874	3.588160	112
3775	3.576917	115	3825	3.582631	114	3875	3.588272	112
3776	3.577032	115	3826	3.582745	113	3876	3.588384	112
3777	3.577147	115	3827	3.582858	114	3877	3.588496	112
3778	3.577262	115	3828	3.582972	113	3878	3.588608	112
3779	3.577377	115	3829	3.583085	114	3879	3.588720	112
3780	3.577492	115	3830	3.583199	113	3880	3.588832	112
3781	3.577607	115	3831	3.583312	114	3881	3.588944	112
3782	3.577722	114	3832	3.583426	113	3882	3.589056	111
3783	3.577836	115	3833	3.583539	113	3883	3.589167	112
3784	3.577951	115	3834	3.583652	113	3884	3.589279	112
3785	3.578066	115	3835	3.583765	114	3885	3.589391	112
3786	3.578181	114	3836	3.583879	113	3886	3.589503	112
3787	3.578295	115	3837	3.583992	113	3887	3.589615	111
3788	3.578410	115	3838	3.584105	113	3888	3.589726	112
3789	3.578525	114	3839	3.584218	113	3889	3.589838	112
3790	3.578639	115	3840	3.584331	113	3890	3.589950	111
3791	3.578754	114	3841	3.584444	113	3891	3.590061	112
3792	3.578868	115	3842	3.584557	113	3892	3.590173	111
3793	3.578983	114	3843	3.584670	113	3893	3.590284	112
3794	3.579097	115	3844	3.584783	113	3894	3.590396	111
3795	3.579212	114	3845	3.584896	113	3895	3.590507	112
3796	3.579326	115	3846	3.585009	113	3896	3.590619	111
3797	3.579441	114	3847	3.585122	113	3897	3.590730	112
3798	3.579555	114	3848	3.585235	113	3898	3.590842	111
3799	3.579669	115	3849	3.585348	113	3899	3.590953	112
3800	3.579784		3850	3.585461		3900	3.591065	

Nomb.	1. 5' 0"	Dif.	Nomb.	1. 5' 50"	Dif.	Nomb.	1. 6' 40"	Dif.
	Logarith.			Logarith.			Logarith.	
3900	3.591065	111	3950	3.596597	110	4000	3.602069	109
3901	3.591176	111	3951	3.596707	110	4001	3.602169	108
3902	3.591287	112	3952	3.596817	110	4002	3.602277	109
3903	3.591399	111	3953	3.596927	110	4003	3.602386	108
3904	3.591510	111	3954	3.597037	109	4004	3.602494	109
3905	3.591621	111	3955	3.597146	110	4005	3.602603	108
3906	3.591732	111	3956	3.597256	110	4006	3.602711	108
3907	3.591843	112	3957	3.597366	110	4007	3.602819	109
3908	3.591955	111	3958	3.597476	110	4008	3.602928	108
3909	3.592066	111	3959	3.597586	109	4009	3.603036	108
3910	3.592177	111	3960	3.597695	110	4010	3.603144	109
3911	3.592288	111	3961	3.597805	109	4011	3.603253	108
3912	3.592399	111	3962	3.597914	110	4012	3.603361	108
3913	3.592510	111	3963	3.598024	110	4013	3.603469	108
3914	3.592621	111	3964	3.598134	109	4014	3.603577	109
3915	3.592732	111	3965	3.598243	110	4015	3.603686	108
3916	3.592843	111	3966	3.598353	109	4016	3.603794	108
3917	3.592954	110	3967	3.598462	110	4017	3.603902	108
3918	3.593064	111	3968	3.598572	109	4018	3.604010	108
3919	3.593175	111	3969	3.598681	110	4019	3.604118	108
3920	3.593286	111	3970	3.598791	109	4020	3.604226	108
3921	3.593397	111	3971	3.598900	109	4021	3.604334	108
3922	3.593508	110	3972	3.599009	110	4022	3.604442	108
3923	3.593618	111	3973	3.599119	109	4023	3.604550	108
3924	3.593729	111	3974	3.599228	109	4024	3.604658	108
3925	3.593840	110	3975	3.599337	109	4025	3.604766	108
3926	3.593950	111	3976	3.599446	110	4026	3.604874	108
3927	3.594061	110	3977	3.599556	109	4027	3.604982	107
3928	3.594171	111	3978	3.599665	109	4028	3.605089	108
3929	3.594282	111	3979	3.599774	109	4029	3.605197	108
3930	3.594393	110	3980	3.599883	109	4030	3.605305	108
3931	3.594503	111	3981	3.599992	109	4031	3.605413	108
3932	3.594614	110	3982	3.600101	109	4032	3.605521	107
3933	3.594724	110	3983	3.600210	109	4033	3.605628	108
3934	3.594834	111	3984	3.600319	109	4034	3.605736	108
3935	3.594945	110	3985	3.600428	109	4035	3.605844	107
3936	3.595055	110	3986	3.600537	109	4036	3.605951	108
3937	3.595165	111	3987	3.600646	109	4037	3.606059	107
3938	3.595276	110	3988	3.600755	109	4038	3.606166	108
3939	3.595386	110	3989	3.600864	109	4039	3.606274	107
3940	3.595496	110	3990	3.600973	109	4040	3.606381	108
3941	3.595606	111	3991	3.601082	109	4041	3.606489	107
3942	3.595717	110	3992	3.601191	108	4042	3.606596	108
3943	3.595827	110	3993	3.601299	109	4043	3.606704	107
3944	3.595937	110	3994	3.601408	109	4044	3.606811	108
3945	3.596047	110	3995	3.601517	108	4045	3.606919	107
3946	3.596157	110	3996	3.601625	109	4046	3.607026	107
3947	3.596267	110	3997	3.601734	109	4047	3.607133	108
3948	3.596377	110	3998	3.601843	108	4048	3.607241	107
3949	3.596487	110	3999	3.601951	109	4049	3.607348	107
3950	3.596597	110	4000	3.602060	109	4050	3.607455	107

Nomb.	1. 7' 30"	Dif.	Nomb.	1. 8' 20"	Dif.	Nomb.	1. 9' 10"	Dif.
	Logarithm.			Logarithm.			Logarithm.	
4050	3.607455	107	4100	3.612784	106	4150	3.618048	105
4051	3.607562	107	4101	3.612890	106	4151	3.618153	104
4052	3.607669	108	4102	3.612996	106	4152	3.618257	105
4053	3.607777	107	4103	3.613102	105	4153	3.618362	104
4054	3.607884	107	4104	3.613207	106	4154	3.618466	105
4055	3.607991	107	4105	3.613313	106	4155	3.618571	105
4056	3.608098	107	4106	3.613419	106	4156	3.618676	104
4057	3.608205	107	4107	3.613525	105	4157	3.618780	104
4058	3.608312	107	4108	3.613630	106	4158	3.618884	105
4059	3.608419	107	4109	3.613736	106	4159	3.618989	104
4060	3.608526	107	4110	3.613842	105	4160	3.619093	105
4061	3.608633	107	4111	3.613947	106	4161	3.619198	104
4062	3.608740	107	4112	3.614053	106	4162	3.619302	104
4063	3.608847	107	4113	3.614159	105	4163	3.619406	105
4064	3.608954	107	4114	3.614264	106	4164	3.619511	104
4065	3.609061	106	4115	3.614370	105	4165	3.619615	104
4066	3.609167	107	4116	3.614475	106	4166	3.619719	105
4067	3.609274	107	4117	3.614581	105	4167	3.619824	104
4068	3.609381	107	4118	3.614686	106	4168	3.619928	104
4069	3.609488	106	4119	3.614792	105	4169	3.620032	104
4070	3.609594	107	4120	3.614897	106	4170	3.620136	104
4071	3.609701	107	4121	3.615003	105	4171	3.620240	104
4072	3.609808	107	4122	3.615108	105	4172	3.620344	104
4073	3.609914	107	4123	3.615213	106	4173	3.620448	104
4074	3.610021	107	4124	3.615319	105	4174	3.620552	104
4075	3.610128	106	4125	3.615424	105	4175	3.620656	104
4076	3.610234	107	4126	3.615529	105	4176	3.620760	104
4077	3.610341	106	4127	3.615634	106	4177	3.620864	104
4078	3.610447	107	4128	3.615740	105	4178	3.620968	104
4079	3.610554	106	4129	3.615845	105	4179	3.621072	104
4080	3.610660	107	4130	3.615950	105	4180	3.621176	104
4081	3.610767	106	4131	3.616055	105	4181	3.621280	104
4082	3.610873	106	4132	3.616160	105	4182	3.621384	104
4083	3.610979	107	4133	3.616265	105	4183	3.621488	104
4084	3.611086	106	4134	3.616370	106	4184	3.621592	103
4085	3.611192	106	4135	3.616476	105	4185	3.621695	104
4086	3.611298	107	4136	3.616581	105	4186	3.621799	104
4087	3.611405	106	4137	3.616686	105	4187	3.621903	104
4088	3.611511	106	4138	3.616790	105	4188	3.622007	103
4089	3.611617	106	4139	3.616895	105	4189	3.622110	104
4090	3.611723	106	4140	3.617000	105	4190	3.622214	104
4091	3.611829	107	4141	3.617105	105	4191	3.622318	103
4092	3.611936	106	4142	3.617210	105	4192	3.622421	104
4093	3.612042	106	4143	3.617315	105	4193	3.622525	103
4094	3.612148	106	4144	3.617420	105	4194	3.622628	104
4095	3.612254	106	4145	3.617525	104	4195	3.622732	103
4096	3.612360	106	4146	3.617629	105	4196	3.622835	104
4097	3.612466	106	4147	3.617734	105	4197	3.622939	103
4098	3.612572	106	4148	3.617839	104	4198	3.623042	104
4099	3.612678	106	4149	3.617943	105	4199	3.623146	103
4100	3.612784		4150	3.618048		4200	3.623249	

Nomb.	1. 10' 0"	Dif.	Nomb.	1. 10' 50"	Dif.	Nomb.	1. 11' 40"	Dif.
	Logarith.			Logarith.			Logarith.	
4200	3.623249		4250	3.628389		4300	3.633468	
4201	3.623353	104	4251	3.628491	102	4301	3.633569	101
4202	3.623456	103	4252	3.628593	102	4302	3.633670	101
4203	3.623559	103	4253	3.628695	102	4303	3.633771	101
4204	3.623663	104	4254	3.628797	102	4304	3.633872	101
		103			103			101
4205	3.623766	103	4255	3.628900	102	4305	3.633973	101
4206	3.623869	104	4256	3.629002	102	4306	3.634074	101
4207	3.623973	103	4257	3.629104	102	4307	3.634175	101
4208	3.624076	103	4258	3.629206	102	4308	3.634276	100
4209	3.624179	103	4259	3.629308	102	4309	3.634376	101
		103			102			101
4210	3.624282	103	4260	3.629410	102	4310	3.634477	101
4211	3.624385	103	4261	3.629512	101	4311	3.634578	101
4212	3.624488	103	4262	3.629613	102	4312	3.634679	100
4213	3.624591	104	4263	3.629715	102	4313	3.634779	101
4214	3.624695	103	4264	3.629817	102	4314	3.634880	101
		103			102			101
4215	3.624798	103	4265	3.629919	102	4315	3.634981	100
4216	3.624901	103	4266	3.630021	102	4316	3.635081	101
4217	3.625004	103	4267	3.630123	101	4317	3.635182	101
4218	3.625107	103	4268	3.630224	102	4318	3.635283	100
4219	3.625210	102	4269	3.630326	102	4319	3.635383	101
		103			102			100
4220	3.625312	103	4270	3.630428	102	4320	3.635484	100
4221	3.625415	103	4271	3.630530	101	4321	3.635584	101
4222	3.625518	103	4272	3.630631	102	4322	3.635685	100
4223	3.625621	103	4273	3.630733	102	4323	3.635785	101
4224	3.625724	103	4274	3.630835	101	4324	3.635886	100
		102			101			101
4225	3.625827	102	4275	3.630936	102	4325	3.635986	101
4226	3.625929	103	4276	3.631038	101	4326	3.636087	100
4227	3.626032	103	4277	3.631139	102	4327	3.636187	100
4228	3.626135	103	4278	3.631241	101	4328	3.636287	101
4229	3.626238	102	4279	3.631342	102	4329	3.636388	100
		103			101			100
4230	3.626340	103	4280	3.631444	101	4330	3.636488	100
4231	3.626443	103	4281	3.631545	102	4331	3.636588	100
4232	3.626546	102	4282	3.631647	101	4332	3.636688	101
4233	3.626648	103	4283	3.631748	101	4333	3.636789	100
4234	3.626751	102	4284	3.631849	102	4334	3.636889	100
		103			101			100
4235	3.626853	103	4285	3.631951	101	4335	3.636989	100
4236	3.626956	102	4286	3.632052	101	4336	3.637089	100
4237	3.627058	103	4287	3.632153	102	4337	3.637189	101
4238	3.627161	102	4288	3.632255	101	4338	3.637290	100
4239	3.627263	103	4289	3.632356	101	4339	3.637390	100
		102			102			100
4240	3.627366	102	4290	3.632457	102	4340	3.637490	100
4241	3.627468	102	4291	3.632559	101	4341	3.637590	100
4242	3.627571	102	4292	3.632660	101	4342	3.637690	100
4243	3.627673	102	4293	3.632761	101	4343	3.637790	100
4244	3.627775	103	4294	3.632862	101	4344	3.637890	100
		102			101			100
4245	3.627878	102	4295	3.632963	101	4345	3.637990	100
4246	3.627980	102	4296	3.633064	101	4346	3.638090	100
4247	3.628082	103	4297	3.633165	101	4347	3.638190	100
4248	3.628185	102	4298	3.633266	101	4348	3.638290	100
4249	3.628287	102	4299	3.633367	101	4349	3.638389	99
4250	3.628389	102	4300	3.633468	101	4350	3.638489	100

Nomb.	1. 12' 30"	Dif.	Nomb.	1. 13' 20"	Dif.	Nomb.	1. 14' 10"	Dif.
	Logarith.			Logarith.			Logarith.	
4350	3.638489	100	4400	3.643453	98	4450	3.648360	98
4351	3.638589	100	4401	3.643551	99	4451	3.648458	97
4352	3.638689	100	4402	3.643650	99	4452	3.648555	98
4353	3.638789	99	4403	3.643749	99	4453	3.648653	97
4354	3.638888	99	4404	3.643847	98	4454	3.648750	98
4355	3.638988	100	4405	3.643946	99	4455	3.648848	97
4356	3.639088	100	4406	3.644044	99	4456	3.648945	98
4357	3.639188	100	4407	3.644143	99	4457	3.649043	97
4358	3.639287	99	4408	3.644242	99	4458	3.649140	97
4359	3.639387	100	4409	3.644340	98	4459	3.649237	98
4360	3.639486	99	4410	3.644439	99	4460	3.649335	97
4361	3.639586	100	4411	3.644537	98	4461	3.649432	98
4362	3.639686	100	4412	3.644636	99	4462	3.649530	97
4363	3.639785	99	4413	3.644734	98	4463	3.649627	97
4364	3.639885	100	4414	3.644832	98	4464	3.649724	97
4365	3.639984	99	4415	3.644931	99	4465	3.649821	98
4366	3.640084	100	4416	3.645029	98	4466	3.649919	97
4367	3.640183	99	4417	3.645127	99	4467	3.650016	97
4368	3.640283	100	4418	3.645226	99	4468	3.650113	97
4369	3.640382	99	4419	3.645324	98	4469	3.650210	98
4370	3.640481	99	4420	3.645422	98	4470	3.650308	97
4371	3.640581	100	4421	3.645521	99	4471	3.650405	97
4372	3.640680	99	4422	3.645619	98	4472	3.650502	97
4373	3.640779	99	4423	3.645717	98	4473	3.650599	97
4374	3.640879	100	4424	3.645815	98	4474	3.650696	97
4375	3.640978	99	4425	3.645913	98	4475	3.650793	97
4376	3.641077	99	4426	3.646011	98	4476	3.650890	97
4377	3.641177	100	4427	3.646110	99	4477	3.650987	97
4378	3.641276	99	4428	3.646208	98	4478	3.651084	97
4379	3.641375	99	4429	3.646306	98	4479	3.651181	97
4380	3.641474	99	4430	3.646404	98	4480	3.651278	97
4381	3.641573	99	4431	3.646502	98	4481	3.651375	97
4382	3.641672	99	4432	3.646600	98	4482	3.651472	97
4383	3.641771	99	4433	3.646698	98	4483	3.651569	97
4384	3.641871	100	4434	3.646796	98	4484	3.651666	96
4385	3.641970	99	4435	3.646894	98	4485	3.651762	97
4386	3.642069	99	4436	3.646992	98	4486	3.651859	97
4387	3.642168	99	4437	3.647089	97	4487	3.651956	97
4388	3.642267	99	4438	3.647187	98	4488	3.652053	97
4389	3.642366	99	4439	3.647285	98	4489	3.652150	97
4390	3.642465	99	4440	3.647383	98	4490	3.652246	96
4391	3.642563	98	4441	3.647481	98	4491	3.652343	97
4392	3.642662	99	4442	3.647579	98	4492	3.652440	97
4393	3.642761	99	4443	3.647676	97	4493	3.652536	96
4394	3.642860	99	4444	3.647774	98	4494	3.652633	97
4395	3.642959	99	4445	3.647872	98	4495	3.652730	97
4396	3.643058	99	4446	3.647969	97	4496	3.652826	96
4397	3.643156	98	4447	3.648067	98	4497	3.652923	97
4398	3.643255	99	4448	3.648165	98	4498	3.653019	96
4399	3.643354	99	4449	3.648262	97	4499	3.653116	97
4400	3.643453	99	4450	3.648360	98	4500	3.653213	97

Nomb.	1. 15 0° Logarith.	Dif.	Nomb.	1. 15 50° Logarith.	Dif.	Nomb.	1. 16 40° Logarith.	Dif.
4500	3.653213	96	4550	3.658011	96	4600	3.662758	94
4501	3.653309	96	4551	3.658107	95	4601	3.662852	95
4502	3.653405	96	4552	3.658202	96	4602	3.662947	94
4503	3.653502	97	4553	3.658298	96	4603	3.663041	94
4504	3.653598	96	4554	3.658393	95	4604	3.663135	95
4505	3.653695	97	4555	3.658488	95	4605	3.663230	94
4506	3.653791	96	4556	3.658584	96	4606	3.663324	94
4507	3.653888	97	4557	3.658679	95	4607	3.663418	94
4508	3.653984	96	4558	3.658774	95	4608	3.663512	94
4509	3.654080	96	4559	3.658870	96	4609	3.663607	95
4510	3.654177	97	4560	3.658965	95	4610	3.663701	94
4511	3.654273	96	4561	3.659060	95	4611	3.663795	94
4512	3.654369	96	4562	3.659155	95	4612	3.663889	94
4513	3.654465	96	4563	3.659250	95	4613	3.663983	94
4514	3.654562	97	4564	3.659346	96	4614	3.664078	95
4515	3.654658	96	4565	3.659441	95	4615	3.664172	94
4516	3.654754	96	4566	3.659536	95	4616	3.664266	94
4517	3.654850	96	4567	3.659631	95	4617	3.664360	94
4518	3.654946	96	4568	3.659726	95	4618	3.664454	94
4519	3.655042	96	4569	3.659821	95	4619	3.664548	94
4520	3.655138	96	4570	3.659916	95	4620	3.664642	94
4521	3.655235	97	4571	3.660011	95	4621	3.664736	94
4522	3.655331	96	4572	3.660106	95	4622	3.664830	94
4523	3.655427	96	4573	3.660201	95	4623	3.664924	94
4524	3.655523	96	4574	3.660296	95	4624	3.665018	94
4525	3.655619	96	4575	3.660391	95	4625	3.665112	94
4526	3.655715	96	4576	3.660486	95	4626	3.665206	93
4527	3.655810	95	4577	3.660581	95	4627	3.665299	94
4528	3.655906	96	4578	3.660676	95	4628	3.665393	94
4529	3.656002	96	4579	3.660771	95	4629	3.665487	94
4530	3.656098	96	4580	3.660865	94	4630	3.665581	94
4531	3.656194	96	4581	3.660960	95	4631	3.665675	94
4532	3.656290	96	4582	3.661055	95	4632	3.665769	93
4533	3.656386	96	4583	3.661150	95	4633	3.665862	94
4534	3.656482	95	4584	3.661245	95	4634	3.665956	94
4535	3.656577	96	4585	3.661339	94	4635	3.666050	93
4536	3.656673	96	4586	3.661434	95	4636	3.666143	94
4537	3.656769	96	4587	3.661529	95	4637	3.666237	94
4538	3.656864	95	4588	3.661623	94	4638	3.666331	93
4539	3.656960	96	4589	3.661718	95	4639	3.666424	94
4540	3.657056	96	4590	3.661813	95	4640	3.666518	94
4541	3.657152	95	4591	3.661907	94	4641	3.666612	93
4542	3.657247	96	4592	3.662002	95	4642	3.666705	94
4543	3.657343	95	4593	3.662096	94	4643	3.666799	93
4544	3.657438	96	4594	3.662191	95	4644	3.666892	94
4545	3.657534	95	4595	3.662286	94	4645	3.666986	93
4546	3.657629	96	4596	3.662380	95	4646	3.667079	94
4547	3.657725	95	4597	3.662475	94	4647	3.667173	93
4548	3.657820	96	4598	3.662569	94	4648	3.667266	94
4549	3.657916	95	4599	3.662663	95	4649	3.667360	93
4550	3.658011	95	4600	3.662758	95	4650	3.667453	93

Nomb.	1. 17' 30"	Dif.	Nomb.	1. 18' 20"	Dif.	Nomb.	1. 19' 10"	Dif.
	Logarith.			Logarith.			Logarith.	
4650	3.667453	93	4700	3.672098	92	4750	3.676694	91
4651	3.667546	94	4701	3.672190	93	4751	3.676785	91
4652	3.667640	93	4702	3.672283	92	4752	3.676876	92
4653	3.667733	93	4703	3.672375	92	4753	3.676968	91
4654	3.667826	93	4704	3.672467	93	4754	3.677059	92
4655	3.667920	93	4705	3.672560	92	4755	3.677151	91
4656	3.668013	93	4706	3.672652	92	4756	3.677242	91
4657	3.668106	93	4707	3.672744	92	4757	3.677333	91
4658	3.668199	93	4708	3.672836	93	4758	3.677424	92
4659	3.668293	93	4709	3.672929	92	4759	3.677516	91
4660	3.668386	93	4710	3.673021	92	4760	3.677607	91
4661	3.668479	93	4711	3.673113	92	4761	3.677698	91
4662	3.668572	93	4712	3.673205	92	4762	3.677789	92
4663	3.668665	93	4713	3.673297	93	4763	3.677881	91
4664	3.668759	93	4714	3.673390	92	4764	3.677972	91
4665	3.668852	93	4715	3.673482	92	4765	3.678063	91
4666	3.668945	93	4716	3.673574	92	4766	3.678154	91
4667	3.669038	93	4717	3.673666	92	4767	3.678245	91
4668	3.669131	93	4718	3.673758	92	4768	3.678336	91
4669	3.669224	93	4719	3.673850	92	4769	3.678427	91
4670	3.669317	93	4720	3.673942	92	4770	3.678518	91
4671	3.669410	93	4721	3.674034	92	4771	3.678609	91
4672	3.669503	93	4722	3.674126	92	4772	3.678700	91
4673	3.669596	93	4723	3.674218	92	4773	3.678791	91
4674	3.669689	93	4724	3.674310	92	4774	3.678882	91
4675	3.669782	93	4725	3.674402	92	4775	3.678973	91
4676	3.669875	92	4726	3.674494	92	4776	3.679064	91
4677	3.669967	92	4727	3.674586	91	4777	3.679155	91
4678	3.670060	93	4728	3.674677	92	4778	3.679246	91
4679	3.670153	93	4729	3.674769	92	4779	3.679337	91
4680	3.670246	93	4730	3.674861	92	4780	3.679428	91
4681	3.670339	92	4731	3.674953	92	4781	3.679519	91
4682	3.670431	92	4732	3.675045	92	4782	3.679610	90
4683	3.670524	93	4733	3.675137	91	4783	3.679700	91
4684	3.670617	93	4734	3.675228	92	4784	3.679791	91
4685	3.670710	92	4735	3.675320	92	4785	3.679882	91
4686	3.670802	92	4736	3.675412	91	4786	3.679973	90
4687	3.670895	93	4737	3.675503	92	4787	3.680063	91
4688	3.670988	92	4738	3.675595	92	4788	3.680154	91
4689	3.671080	93	4739	3.675687	91	4789	3.680245	91
4690	3.671173	92	4740	3.675778	92	4790	3.680336	90
4691	3.671265	93	4741	3.675870	92	4791	3.680426	91
4692	3.671358	93	4742	3.675962	91	4792	3.680517	90
4693	3.671451	92	4743	3.676053	92	4793	3.680607	91
4694	3.671543	93	4744	3.676145	91	4794	3.680698	91
4695	3.671636	92	4745	3.676236	92	4795	3.680789	90
4696	3.671728	93	4746	3.676328	91	4796	3.680879	91
4697	3.671821	92	4747	3.676419	92	4797	3.680970	90
4698	3.671913	92	4748	3.676511	91	4798	3.681060	91
4699	3.672005	93	4749	3.676602	92	4799	3.681151	90
4700	3.672098		4750	3.676694		4800	3.681241	

Nomb.	1. 20' 0"	Dif.	Nomb.	1. 20' 50"	Dif.	Nomb.	1. 21' 40"	Dif.
4800	3.681241		4850	3.685742	89	4900	3.690196	89
4801	3.681332	91	4851	3.685831	90	4901	3.690285	88
4802	3.681422	90	4852	3.685921	89	4902	3.690373	89
4803	3.681513	91	4853	3.686010	89	4903	3.690462	88
4804	3.681603	90	4854	3.686100	90	4904	3.690550	89
		90			89			89
4805	3.681693	91	4855	3.686189	90	4905	3.690639	89
4806	3.681784	90	4856	3.686279	89	4906	3.690728	88
4807	3.681874	91	4857	3.686368	90	4907	3.690816	89
4808	3.681964	90	4858	3.686458	89	4908	3.690905	88
4809	3.682055	91	4859	3.686547	89	4909	3.690993	88
		90			89			89
4810	3.682145	90	4860	3.686636	90	4910	3.691081	89
4811	3.682235	91	4861	3.686726	89	4911	3.691170	88
4812	3.682326	90	4862	3.686815	89	4912	3.691258	89
4813	3.682416	91	4863	3.686904	90	4913	3.691347	88
4814	3.682506	90	4864	3.686994	89	4914	3.691435	89
		90			89			89
4815	3.682596	91	4865	3.687083	90	4915	3.691524	88
4816	3.682686	90	4866	3.687172	89	4916	3.691612	88
4817	3.682777	91	4867	3.687261	90	4917	3.691700	89
4818	3.682867	90	4868	3.687351	89	4918	3.691789	88
4819	3.682957	91	4869	3.687440	89	4919	3.691877	88
		90			89			89
4820	3.683047	90	4870	3.687529	90	4920	3.691965	88
4821	3.683137	91	4871	3.687618	89	4921	3.692053	89
4822	3.683227	90	4872	3.687707	89	4922	3.692142	88
4823	3.683317	91	4873	3.687796	90	4923	3.692230	88
4824	3.683407	90	4874	3.687886	89	4924	3.692318	88
		90			89			89
4825	3.683497	91	4875	3.687975	90	4925	3.692406	88
4826	3.683587	90	4876	3.688064	89	4926	3.692494	89
4827	3.683677	91	4877	3.688153	90	4927	3.692583	88
4828	3.683767	90	4878	3.688242	89	4928	3.692671	88
4829	3.683857	91	4879	3.688331	89	4929	3.692759	88
		90			89			89
4830	3.683947	90	4880	3.688420	90	4930	3.692847	88
4831	3.684037	91	4881	3.688509	89	4931	3.692935	88
4832	3.684127	90	4882	3.688598	89	4932	3.693023	88
4833	3.684217	91	4883	3.688687	90	4933	3.693111	88
4834	3.684307	90	4884	3.688776	89	4934	3.693199	88
		89			89			89
4835	3.684396	90	4885	3.688865	90	4935	3.693287	88
4836	3.684486	91	4886	3.688953	89	4936	3.693375	88
4837	3.684576	90	4887	3.689042	89	4937	3.693463	88
4838	3.684666	91	4888	3.689131	90	4938	3.693551	88
4839	3.684756	90	4889	3.689220	89	4939	3.693639	88
		89			89			89
4840	3.684845	90	4890	3.689309	90	4940	3.693727	88
4841	3.684935	91	4891	3.689398	89	4941	3.693815	88
4842	3.685025	90	4892	3.689486	89	4942	3.693903	88
4843	3.685114	91	4893	3.689575	90	4943	3.693991	87
4844	3.685204	90	4894	3.689664	89	4944	3.694078	88
		90			89			89
4845	3.685294	91	4895	3.689753	90	4945	3.694166	88
4846	3.685383	90	4896	3.689841	89	4946	3.694254	88
4847	3.685473	91	4897	3.689930	90	4947	3.694342	88
4848	3.685563	90	4898	3.690019	89	4948	3.694430	87
4849	3.685652	89	4899	3.690107	89	4949	3.694517	88
4850	3.685742	90	4900	3.690196	89	4950	3.694605	88

Nomb.	1. 22' 30" Logarith.	Dif.	Nomb.	1. 23' 20" Logarith.	Dif.	Nomb.	1. 24' 10" Logarith.	Dif.
4950	3.694605	88	5000	3.698970	87	5050	3.703291	86
4951	3.694693	88	5001	3.699057	87	5051	3.703377	86
4952	3.694781	87	5002	3.699144	87	5052	3.703463	86
4953	3.694868	88	5003	3.699231	86	5053	3.703549	86
4954	3.694956	88	5004	3.699317	87	5054	3.703635	86
4955	3.695044	87	5005	3.699404	87	5055	3.703721	86
4956	3.695131	88	5006	3.699491	87	5056	3.703807	86
4957	3.695219	88	5007	3.699578	86	5057	3.703893	86
4958	3.695307	87	5008	3.699664	87	5058	3.703979	86
4959	3.695394	88	5009	3.699751	87	5059	3.704065	86
4960	3.695482	87	5010	3.699838	86	5060	3.704151	85
4961	3.695569	88	5011	3.699924	87	5061	3.704236	86
4962	3.695657	87	5012	3.700011	87	5062	3.704322	86
4963	3.695744	88	5013	3.700098	86	5063	3.704408	86
4964	3.695832	87	5014	3.700184	87	5064	3.704494	85
4965	3.695919	88	5015	3.700271	87	5065	3.704579	86
4966	3.696007	87	5016	3.700358	86	5066	3.704665	86
4967	3.696094	88	5017	3.700444	87	5067	3.704751	86
4968	3.696182	87	5018	3.700531	86	5068	3.704837	85
4969	3.696269	87	5019	3.700617	87	5069	3.704922	86
4970	3.696356	88	5020	3.700704	86	5070	3.705008	86
4971	3.696444	87	5021	3.700790	87	5071	3.705094	85
4972	3.696531	87	5022	3.700877	86	5072	3.705179	86
4973	3.696618	88	5023	3.700963	87	5073	3.705265	85
4974	3.696706	87	5024	3.701050	86	5074	3.705350	86
4975	3.696793	87	5025	3.701136	86	5075	3.705436	86
4976	3.696880	88	5026	3.701222	87	5076	3.705522	85
4977	3.696968	87	5027	3.701309	86	5077	3.705607	86
4978	3.697055	87	5028	3.701395	87	5078	3.705693	85
4979	3.697142	87	5029	3.701482	86	5079	3.705778	86
4980	3.697229	88	5030	3.701568	86	5080	3.705864	85
4981	3.697317	87	5031	3.701654	87	5081	3.705949	86
4982	3.697404	87	5032	3.701741	86	5082	3.706035	85
4983	3.697491	87	5033	3.701827	86	5083	3.706120	86
4984	3.697578	87	5034	3.701913	86	5084	3.706206	85
4985	3.697665	87	5035	3.701999	87	5085	3.706291	85
4986	3.697752	87	5036	3.702086	86	5086	3.706376	86
4987	3.697839	87	5037	3.702172	86	5087	3.706462	85
4988	3.697926	88	5038	3.702258	86	5088	3.706547	85
4989	3.698014	87	5039	3.702344	87	5089	3.706632	86
4990	3.698101	87	5040	3.702431	86	5090	3.706718	85
4991	3.698188	87	5041	3.702517	86	5091	3.706803	85
4992	3.698275	87	5042	3.702603	86	5092	3.706888	86
4993	3.698362	87	5043	3.702689	86	5093	3.706974	85
4994	3.698449	86	5044	3.702775	86	5094	3.707059	85
4995	3.698535	87	5045	3.702861	86	5095	3.707144	85
4996	3.698622	87	5046	3.702947	86	5096	3.707229	86
4997	3.698709	87	5047	3.703033	86	5097	3.707315	85
4998	3.698796	87	5048	3.703119	86	5098	3.707400	85
4999	3.698883	87	5049	3.703205	86	5099	3.707485	85
5000	3.698970	87	5050	3.703291	86	5100	3.707570	85

Nomb.	1. 25' 0"	Dif.	Nomb.	1. 25' 50"	Dif.	Nomb.	1. 26' 40"	Dif.
Logarith.			Logarith.			Logarith.		
5100	3.707570		5150	3.711807	85	5200	3.716003	84
5101	3.707655	85	5151	3.711892	84	5201	3.716087	83
5102	3.707740	85	5152	3.711976	84	5202	3.716170	84
5103	3.707826	86	5153	3.712060	84	5203	3.716254	83
5104	3.707911	85	5154	3.712144	84	5204	3.716337	84
		85			85			83
5105	3.707996	85	5155	3.712229	84	5205	3.716421	83
5106	3.708081	85	5156	3.712313	84	5206	3.716504	84
5107	3.708166	85	5157	3.712397	84	5207	3.716588	83
5108	3.708251	85	5158	3.712481	84	5208	3.716671	83
5109	3.708336	85	5159	3.712566	85	5209	3.716754	84
		85			84			83
5110	3.708421	85	5160	3.712650	84	5210	3.716838	83
5111	3.708506	85	5161	3.712734	84	5211	3.716921	83
5112	3.708591	85	5162	3.712818	84	5212	3.717004	84
5113	3.708676	85	5163	3.712902	84	5213	3.717088	83
5114	3.708761	85	5164	3.712986	84	5214	3.717171	83
		85			84			84
5115	3.708846	85	5165	3.713070	84	5215	3.717254	84
5116	3.708931	84	5166	3.713154	84	5216	3.717338	83
5117	3.709015	85	5167	3.713238	83	5217	3.717421	83
5118	3.709100	85	5168	3.713323	84	5218	3.717504	83
5119	3.709185	85	5169	3.713407	84	5219	3.717587	84
		85			84			83
5120	3.709270	85	5170	3.713491	84	5220	3.717671	83
5121	3.709355	85	5171	3.713575	84	5221	3.717754	83
5122	3.709440	84	5172	3.713659	83	5222	3.717837	83
5123	3.709524	85	5173	3.713742	84	5223	3.717920	83
5124	3.709609	85	5174	3.713826	84	5224	3.718003	83
		85			84			83
5125	3.709694	85	5175	3.713910	84	5225	3.718086	83
5126	3.709779	84	5176	3.713994	84	5226	3.718169	84
5127	3.709863	85	5177	3.714078	84	5227	3.718253	83
5128	3.709948	85	5178	3.714162	84	5228	3.718336	83
5129	3.710033	84	5179	3.714246	84	5229	3.718419	83
		84			84			83
5130	3.710117	85	5180	3.714330	84	5230	3.718502	83
5131	3.710202	85	5181	3.714414	83	5231	3.718585	83
5132	3.710287	84	5182	3.714497	84	5232	3.718668	83
5133	3.710371	85	5183	3.714581	84	5233	3.718751	83
5134	3.710456	84	5184	3.714665	84	5234	3.718834	83
		84			84			83
5135	3.710540	85	5185	3.714749	84	5235	3.718917	83
5136	3.710625	85	5186	3.714833	83	5236	3.719000	83
5137	3.710710	84	5187	3.714916	84	5237	3.719083	82
5138	3.710794	85	5188	3.715000	84	5238	3.719165	83
5139	3.710879	84	5189	3.715084	83	5239	3.719248	83
		84			84			83
5140	3.710963	85	5190	3.715167	84	5240	3.719331	83
5141	3.711048	84	5191	3.715251	84	5241	3.719414	83
5142	3.711132	85	5192	3.715335	83	5242	3.719497	83
5143	3.711217	84	5193	3.715418	84	5243	3.719580	83
5144	3.711301	84	5194	3.715502	84	5244	3.719663	82
		84			84			83
5145	3.711385	85	5195	3.715586	83	5245	3.719745	83
5146	3.711470	84	5196	3.715669	84	5246	3.719828	83
5147	3.711554	85	5197	3.715753	83	5247	3.719911	83
5148	3.711639	84	5198	3.715836	84	5248	3.719994	83
5149	3.711723	84	5199	3.715920	83	5249	3.720077	82
5150	3.711807	84	5200	3.716003	83	5250	3.720159	

Nomb.	1. 27' 30"	Dif.	Nomb.	1. 28' 20"	Dif.	Nomb.	1. 29' 10"	Dif.
	Logarith.			Logarith.			Logarith.	
5250	3.720159		5300	3.724276		5350	3.728354	
5251	3.720242	83	5301	3.724358	82	5351	3.728435	81
5252	3.720325	83	5302	3.724440	82	5352	3.728516	81
5253	3.720407	82	5303	3.724522	82	5353	3.728597	81
5254	3.720490	83	5304	3.724604	82	5354	3.728678	81
5255	3.720573	83	5305	3.724685	81	5355	3.728759	82
5256	3.720655	83	5306	3.724767	82	5356	3.728841	81
5257	3.720738	83	5307	3.724849	82	5357	3.728922	81
5258	3.720821	82	5308	3.724931	82	5358	3.729003	81
5259	3.720903	83	5309	3.725013	82	5359	3.729084	81
5260	3.720986	82	5310	3.725095	82	5360	3.729165	81
5261	3.721068	83	5311	3.725176	81	5361	3.729246	81
5262	3.721151	83	5312	3.725258	82	5362	3.729327	81
5263	3.721233	82	5313	3.725340	82	5363	3.729408	81
5264	3.721316	83	5314	3.725422	82	5364	3.729489	81
5265	3.721398	82	5315	3.725503	81	5365	3.729570	81
5266	3.721481	83	5316	3.725585	82	5366	3.729651	81
5267	3.721563	82	5317	3.725667	82	5367	3.729732	81
5268	3.721646	83	5318	3.725748	81	5368	3.729813	81
5269	3.721728	82	5319	3.725830	82	5369	3.729893	80
5270	3.721811	83	5320	3.725912	82	5370	3.729974	81
5271	3.721893	82	5321	3.725993	81	5371	3.730055	81
5272	3.721975	83	5322	3.726075	82	5372	3.730136	81
5273	3.722058	83	5323	3.726156	81	5373	3.730217	81
5274	3.722140	82	5324	3.726238	82	5374	3.730298	81
5275	3.722222	82	5325	3.726320	82	5375	3.730378	80
5276	3.722305	83	5326	3.726401	81	5376	3.730459	81
5277	3.722387	82	5327	3.726483	82	5377	3.730540	81
5278	3.722469	82	5328	3.726564	81	5378	3.730621	81
5279	3.722552	83	5329	3.726646	82	5379	3.730702	81
5280	3.722634	82	5330	3.726727	81	5380	3.730782	80
5281	3.722716	82	5331	3.726809	82	5381	3.730863	81
5282	3.722798	83	5332	3.726890	81	5382	3.730944	81
5283	3.722881	82	5333	3.726972	82	5383	3.731024	80
5284	3.722963	83	5334	3.727053	81	5384	3.731105	81
5285	3.723045	82	5335	3.727134	82	5385	3.731186	81
5286	3.723127	82	5336	3.727216	81	5386	3.731266	80
5287	3.723209	83	5337	3.727297	82	5387	3.731347	81
5288	3.723291	82	5338	3.727379	81	5388	3.731428	81
5289	3.723374	82	5339	3.727460	82	5389	3.731508	80
5290	3.723456	83	5340	3.727541	81	5390	3.731589	81
5291	3.723538	82	5341	3.727623	82	5391	3.731669	80
5292	3.723620	82	5342	3.727704	81	5392	3.731750	81
5293	3.723702	83	5343	3.727785	82	5393	3.731830	80
5294	3.723784	82	5344	3.727866	81	5394	3.731911	81
5295	3.723866	82	5345	3.727948	82	5395	3.731991	80
5296	3.723948	83	5346	3.728029	81	5396	3.732072	81
5297	3.724030	82	5347	3.728110	82	5397	3.732152	80
5298	3.724112	82	5348	3.728191	81	5398	3.732233	81
5299	3.724194	83	5349	3.728273	82	5399	3.732313	80
5300	3.724276	82	5350	3.728354	81	5400	3.732394	81

Nomb.	1. 30' 0"	Dif.	Nomb.	1. 30' 50"	Dif.	Nomb.	1. 31' 40"	Dif.
5400	3.732394	80	5450	3.736397	79	5500	3.740363	79
5401	3.732474	81	5451	3.736476	80	5501	3.740442	79
5402	3.732555	80	5452	3.736556	79	5502	3.740521	79
5403	3.732635	80	5453	3.736635	80	5503	3.740600	79
5404	3.732715	81	5454	3.736715	80	5504	3.740678	78
5405	3.732796	80	5455	3.736795	80	5505	3.740757	79
5406	3.732876	80	5456	3.736874	79	5506	3.740836	79
5407	3.732956	81	5457	3.736954	80	5507	3.740915	79
5408	3.733037	80	5458	3.737034	79	5508	3.740994	79
5409	3.733117	80	5459	3.737113	80	5509	3.741073	79
5410	3.733197	81	5460	3.737193	79	5510	3.741152	79
5411	3.733278	80	5461	3.737272	80	5511	3.741230	78
5412	3.733358	80	5462	3.737352	79	5512	3.741309	79
5413	3.733438	80	5463	3.737431	80	5513	3.741388	79
5414	3.733518	81	5464	3.737511	79	5514	3.741467	79
5415	3.733598	80	5465	3.737590	80	5515	3.741546	78
5416	3.733679	80	5466	3.737670	79	5516	3.741624	79
5417	3.733759	80	5467	3.737749	80	5517	3.741703	79
5418	3.733839	80	5468	3.737829	79	5518	3.741782	79
5419	3.733919	80	5469	3.737908	80	5519	3.741860	78
5420	3.733999	81	5470	3.737987	79	5520	3.741939	79
5421	3.734079	80	5471	3.738067	80	5521	3.742018	79
5422	3.734160	81	5472	3.738146	79	5522	3.742096	78
5423	3.734240	80	5473	3.738225	80	5523	3.742175	79
5424	3.734320	80	5474	3.738305	79	5524	3.742254	78
5425	3.734400	81	5475	3.738384	80	5525	3.742332	79
5426	3.734480	80	5476	3.738463	79	5526	3.742411	78
5427	3.734560	80	5477	3.738543	80	5527	3.742489	79
5428	3.734640	81	5478	3.738622	79	5528	3.742568	79
5429	3.734720	80	5479	3.738701	80	5529	3.742647	78
5430	3.734800	80	5480	3.738781	79	5530	3.742725	79
5431	3.734880	81	5481	3.738860	80	5531	3.742804	79
5432	3.734960	80	5482	3.738939	79	5532	3.742882	78
5433	3.735040	80	5483	3.739018	80	5533	3.742961	79
5434	3.735120	81	5484	3.739097	79	5534	3.743039	78
5435	3.735200	80	5485	3.739177	80	5535	3.743118	79
5436	3.735279	79	5486	3.739256	79	5536	3.743196	78
5437	3.735359	80	5487	3.739335	80	5537	3.743275	79
5438	3.735439	80	5488	3.739414	79	5538	3.743353	78
5439	3.735519	81	5489	3.739493	80	5539	3.743431	79
5440	3.735599	80	5490	3.739572	79	5540	3.743510	78
5441	3.735679	80	5491	3.739651	80	5541	3.743588	79
5442	3.735759	81	5492	3.739731	79	5542	3.743667	78
5443	3.735838	80	5493	3.739810	80	5543	3.743745	79
5444	3.735918	80	5494	3.739889	79	5544	3.743823	78
5445	3.735998	81	5495	3.739968	80	5545	3.743902	79
5446	3.736078	80	5496	3.740047	79	5546	3.743980	78
5447	3.736157	79	5497	3.740126	80	5547	3.744058	79
5448	3.736237	80	5498	3.740205	79	5548	3.744136	78
5449	3.736317	81	5499	3.740284	80	5549	3.744215	79
5450	3.736397	80	5500	3.740363	79	5550	3.744293	78

Nomb.	1. 32' 30"	Dif.	Nomb.	1. 33' 20"	Dif.	Nomb.	1. 34' 10"	Dif.
	Logarith.			Logarith.			Logarith.	
5550	3.744293	78	5600	3.748188	78	5650	3.752048	77
5551	3.744371	78	5601	3.748266	77	5651	3.752125	77
5552	3.744449	78	5602	3.748343	77	5652	3.752202	77
5553	3.744528	79	5603	3.748421	78	5653	3.752279	77
5554	3.744606	78	5604	3.748498	77	5654	3.752356	77
5555	3.744684	78	5605	3.748576	78	5655	3.752433	77
5556	3.744762	78	5606	3.748653	77	5656	3.752509	76
5557	3.744840	78	5607	3.748731	78	5657	3.752586	77
5558	3.744919	79	5608	3.748808	77	5658	3.752663	77
5559	3.744997	78	5609	3.748885	77	5659	3.752740	77
5560	3.745075	78	5610	3.748963	78	5660	3.752816	76
5561	3.745153	78	5611	3.749040	77	5661	3.752893	77
5562	3.745231	78	5612	3.749118	78	5662	3.752970	77
5563	3.745309	78	5613	3.749195	77	5663	3.753047	77
5564	3.745387	78	5614	3.749272	77	5664	3.753123	76
5565	3.745465	78	5615	3.749350	78	5665	3.753200	77
5566	3.745543	78	5616	3.749427	77	5666	3.753277	77
5567	3.745621	78	5617	3.749504	77	5667	3.753353	76
5568	3.745699	78	5618	3.749582	78	5668	3.753430	77
5569	3.745777	78	5619	3.749659	77	5669	3.753506	76
5570	3.745855	78	5620	3.749736	77	5670	3.753583	77
5571	3.745933	78	5621	3.749814	78	5671	3.753660	77
5572	3.746011	78	5622	3.749891	77	5672	3.753736	76
5573	3.746089	78	5623	3.749968	77	5673	3.753813	77
5574	3.746167	78	5624	3.750045	77	5674	3.753889	76
5575	3.746245	78	5625	3.750123	78	5675	3.753966	77
5576	3.746323	78	5626	3.750200	77	5676	3.754042	76
5577	3.746401	78	5627	3.750277	77	5677	3.754119	77
5578	3.746478	77	5628	3.750354	77	5678	3.754195	76
5579	3.746556	78	5629	3.750431	77	5679	3.754272	77
5580	3.746634	78	5630	3.750508	77	5680	3.754348	76
5581	3.746712	78	5631	3.750586	78	5681	3.754425	77
5582	3.746790	78	5632	3.750663	77	5682	3.754501	76
5583	3.746868	78	5633	3.750740	77	5683	3.754578	77
5584	3.746945	77	5634	3.750817	77	5684	3.754654	76
5585	3.747023	78	5635	3.750894	77	5685	3.754730	77
5586	3.747101	78	5636	3.750971	77	5686	3.754807	76
5587	3.747179	78	5637	3.751048	77	5687	3.754883	77
5588	3.747256	77	5638	3.751125	77	5688	3.754960	76
5589	3.747334	78	5639	3.751202	77	5689	3.755036	77
5590	3.747412	77	5640	3.751279	77	5690	3.755112	76
5591	3.747489	77	5641	3.751356	77	5691	3.755189	77
5592	3.747567	78	5642	3.751433	77	5692	3.755265	76
5593	3.747645	78	5643	3.751510	77	5693	3.755341	77
5594	3.747722	77	5644	3.751587	77	5694	3.755417	76
5595	3.747800	78	5645	3.751664	77	5695	3.755494	77
5596	3.747878	78	5646	3.751741	77	5696	3.755570	76
5597	3.747955	77	5647	3.751818	77	5697	3.755646	77
5598	3.748033	78	5648	3.751895	77	5698	3.755722	76
5599	3.748110	77	5649	3.751972	77	5699	3.755799	77
5600	3.748188	78	5650	3.752048	76	5700	3.755875	76

Nomb.	1. 35' 0"	Dif.	Nomb.	1. 35' 50"	Dif.	Nomb.	1. 36' 40"	Dif.
5700	3.755875		5750	3.759668		5800	3.763428	
5701	3.755951	76	5751	3.759743	75	5801	3.763503	75
5702	3.756027	76	5752	3.759819	76	5802	3.763578	75
5703	3.756103	76	5753	3.759894	75	5803	3.763653	75
5704	3.756180	77	5754	3.759970	76	5804	3.763727	74
5705	3.756256	76	5755	3.760045	75	5805	3.763802	75
5706	3.756332	76	5756	3.760121	76	5806	3.763877	75
5707	3.756408	76	5757	3.760196	75	5807	3.763952	75
5708	3.756484	76	5758	3.760272	76	5808	3.764027	75
5709	3.756560	76	5759	3.760347	75	5809	3.764101	74
5710	3.756636	76	5760	3.760422	75	5810	3.764176	75
5711	3.756712	76	5761	3.760498	76	5811	3.764251	75
5712	3.756788	76	5762	3.760573	75	5812	3.764326	75
5713	3.756864	76	5763	3.760649	76	5813	3.764400	74
5714	3.756940	76	5764	3.760724	75	5814	3.764475	75
5715	3.757016	76	5765	3.760799	75	5815	3.764550	75
5716	3.757092	76	5766	3.760875	76	5816	3.764624	74
5717	3.757168	76	5767	3.760950	75	5817	3.764699	75
5718	3.757244	76	5768	3.761025	75	5818	3.764774	75
5719	3.757320	76	5769	3.761101	76	5819	3.764848	74
5720	3.757396	76	5770	3.761176	75	5820	3.764923	75
5721	3.757472	76	5771	3.761251	75	5821	3.764998	75
5722	3.757548	76	5772	3.761326	76	5822	3.765072	74
5723	3.757624	76	5773	3.761402	75	5823	3.765147	75
5724	3.757700	75	5774	3.761477	76	5824	3.765221	74
5725	3.757775	76	5775	3.761552	75	5825	3.765296	75
5726	3.757851	76	5776	3.761627	75	5826	3.765370	74
5727	3.757927	76	5777	3.761702	76	5827	3.765445	75
5728	3.758003	76	5778	3.761778	75	5828	3.765520	74
5729	3.758079	76	5779	3.761853	76	5829	3.765594	75
5730	3.758155	75	5780	3.761928	75	5830	3.765669	74
5731	3.758230	76	5781	3.762003	75	5831	3.765743	75
5732	3.758306	76	5782	3.762078	76	5832	3.765818	74
5733	3.758382	76	5783	3.762153	75	5833	3.765893	75
5734	3.758458	75	5784	3.762228	76	5834	3.765968	74
5735	3.758533	76	5785	3.762303	75	5835	3.766041	75
5736	3.758609	76	5786	3.762378	76	5836	3.766115	74
5737	3.758685	76	5787	3.762453	75	5837	3.766190	75
5738	3.758761	75	5788	3.762529	76	5838	3.766264	74
5739	3.758836	76	5789	3.762604	75	5839	3.766338	75
5740	3.758912	76	5790	3.762679	76	5840	3.766413	74
5741	3.758988	75	5791	3.762754	75	5841	3.766487	75
5742	3.759063	76	5792	3.762829	76	5842	3.766562	74
5743	3.759139	75	5793	3.762904	75	5843	3.766636	75
5744	3.759214	76	5794	3.762979	74	5844	3.766710	74
5745	3.759290	76	5795	3.763053	75	5845	3.766785	75
5746	3.759366	75	5796	3.763128	76	5846	3.766859	74
5747	3.759441	76	5797	3.763203	75	5847	3.766933	75
5748	3.759517	75	5798	3.763278	76	5848	3.767007	74
5749	3.759592	76	5799	3.763353	75	5849	3.767082	75
5750	3.759668	76	5800	3.763428	75	5850	3.767156	74

Nomb.	1. 37' 30"	Dif.	Nomb.	1. 38' 20"	Dif.	Nomb.	1. 39' 10"	Dif.
5850	3.767156		5900	3.770852		5950	3.774517	73
5851	3.767230	74	5901	3.770926	74	5951	3.774590	73
5852	3.767304	74	5902	3.770999	73	5952	3.774663	73
5853	3.767379	75	5903	3.771073	74	5953	3.774736	73
5854	3.767453	74	5904	3.771146	73	5954	3.774809	73
		74			74			73
5855	3.767527	74	5905	3.771220	73	5955	3.774882	73
5856	3.767601	74	5906	3.771293	74	5956	3.774955	73
5857	3.767675	74	5907	3.771367	74	5957	3.775028	72
5858	3.767749	74	5908	3.771440	73	5958	3.775100	73
5859	3.767823	74	5909	3.771514	74	5959	3.775173	73
		75			73			73
5860	3.767898	74	5910	3.771587	74	5960	3.775246	73
5861	3.767972	74	5911	3.771661	74	5961	3.775319	73
5862	3.768046	74	5912	3.771734	73	5962	3.775392	73
5863	3.768120	74	5913	3.771808	74	5963	3.775465	73
5864	3.768194	74	5914	3.771881	73	5964	3.775538	72
		74			74			73
5865	3.768268	74	5915	3.771955	73	5965	3.775610	73
5866	3.768342	74	5916	3.772028	74	5966	3.775683	73
5867	3.768416	74	5917	3.772102	74	5967	3.775756	73
5868	3.768490	74	5918	3.772175	73	5968	3.775829	73
5869	3.768564	74	5919	3.772248	73	5969	3.775902	72
		74			74			73
5870	3.768638	74	5920	3.772322	73	5970	3.775974	73
5871	3.768712	74	5921	3.772395	73	5971	3.776047	73
5872	3.768786	74	5922	3.772468	73	5972	3.776120	73
5873	3.768860	74	5923	3.772542	74	5973	3.776193	72
5874	3.768934	74	5924	3.772615	73	5974	3.776265	73
		74			73			73
5875	3.769008	74	5925	3.772688	74	5975	3.776338	73
5876	3.769082	74	5926	3.772762	74	5976	3.776411	72
5877	3.769156	74	5927	3.772835	73	5977	3.776483	73
5878	3.769230	74	5928	3.772908	73	5978	3.776556	73
5879	3.769303	73	5929	3.772981	73	5979	3.776629	72
		74			74			73
5880	3.769377	74	5930	3.773055	73	5980	3.776701	73
5881	3.769451	74	5931	3.773128	73	5981	3.776774	72
5882	3.769525	74	5932	3.773201	73	5982	3.776846	73
5883	3.769599	74	5933	3.773274	73	5983	3.776919	73
5884	3.769673	74	5934	3.773348	74	5984	3.776992	72
		73			73			73
5885	3.769746	74	5935	3.773421	73	5985	3.777064	73
5886	3.769820	74	5936	3.773494	73	5986	3.777137	72
5887	3.769894	74	5937	3.773567	73	5987	3.777209	73
5888	3.769968	74	5938	3.773640	73	5988	3.777282	72
5889	3.770042	74	5939	3.773713	73	5989	3.777354	73
		73			73			72
5890	3.770115	74	5940	3.773786	74	5990	3.777427	72
5891	3.770189	74	5941	3.773860	73	5991	3.777499	73
5892	3.770263	73	5942	3.773933	73	5992	3.777572	72
5893	3.770336	74	5943	3.774006	73	5993	3.777644	73
5894	3.770410	74	5944	3.774079	73	5994	3.777717	72
		74			73			73
5895	3.770484	73	5945	3.774152	73	5995	3.777789	73
5896	3.770557	74	5946	3.774225	73	5996	3.777862	72
5897	3.770631	74	5947	3.774298	73	5997	3.777934	72
5898	3.770705	74	5948	3.774371	73	5998	3.778006	73
5899	3.770778	73	5949	3.774444	73	5999	3.778079	72
5900	3.770852	74	5950	3.774517	73	6000	3.778151	

Nomb.	1. 40' 0"	Dif.	Nomb.	1. 40' 50"	Dif.	Nomb.	1. 41' 40"	Dif.
6000	3.778151	73	6050	3.781755	72	6100	3.785330	71
6001	3.778224	72	6051	3.781827	72	6101	3.785401	71
6002	3.778296	72	6052	3.781899	72	6102	3.785472	71
6003	3.778368	72	6053	3.781971	71	6103	3.785543	71
6004	3.778441	73	6054	3.782042	71	6104	3.785615	72
6005	3.778513	72	6055	3.782114	72	6105	3.785686	71
6006	3.778585	72	6056	3.782186	72	6106	3.785757	71
6007	3.778658	73	6057	3.782258	72	6107	3.785828	71
6008	3.778730	72	6058	3.782329	71	6108	3.785899	71
6009	3.778802	72	6059	3.782401	72	6109	3.785970	71
6010	3.778874	72	6060	3.782473	72	6110	3.786041	71
6011	3.778947	73	6061	3.782544	72	6111	3.786112	71
6012	3.779019	72	6062	3.782616	71	6112	3.786183	71
6013	3.779091	72	6063	3.782688	72	6113	3.786254	71
6014	3.779163	72	6064	3.782759	71	6114	3.786325	71
6015	3.779236	73	6065	3.782831	72	6115	3.786396	71
6016	3.779308	72	6066	3.782902	72	6116	3.786467	71
6017	3.779380	72	6067	3.782974	71	6117	3.786538	71
6018	3.779452	72	6068	3.783046	72	6118	3.786609	71
6019	3.779524	72	6069	3.783117	71	6119	3.786680	71
6020	3.779596	73	6070	3.783189	72	6120	3.786751	71
6021	3.779669	72	6071	3.783260	71	6121	3.786822	71
6022	3.779741	72	6072	3.783332	72	6122	3.786893	71
6023	3.779813	72	6073	3.783403	71	6123	3.786964	71
6024	3.779885	72	6074	3.783475	72	6124	3.787035	71
6025	3.779957	72	6075	3.783546	71	6125	3.787106	71
6026	3.780029	72	6076	3.783618	72	6126	3.787177	71
6027	3.780101	72	6077	3.783689	71	6127	3.787248	71
6028	3.780173	72	6078	3.783761	72	6128	3.787319	71
6029	3.780245	72	6079	3.783832	71	6129	3.787390	71
6030	3.780317	72	6080	3.783904	72	6130	3.787460	70
6031	3.780389	72	6081	3.783975	71	6131	3.787531	71
6032	3.780461	72	6082	3.784046	72	6132	3.787602	71
6033	3.780533	72	6083	3.784118	71	6133	3.787673	71
6034	3.780605	72	6084	3.784189	72	6134	3.787744	71
6035	3.780677	72	6085	3.784261	71	6135	3.787815	71
6036	3.780749	72	6086	3.784332	72	6136	3.787886	70
6037	3.780821	72	6087	3.784403	71	6137	3.787957	71
6038	3.780893	72	6088	3.784475	72	6138	3.788027	71
6039	3.780965	72	6089	3.784546	71	6139	3.788098	71
6040	3.781037	72	6090	3.784617	72	6140	3.788168	70
6041	3.781109	72	6091	3.784689	71	6141	3.788239	71
6042	3.781181	72	6092	3.784760	72	6142	3.788310	71
6043	3.781253	72	6093	3.784831	71	6143	3.788381	71
6044	3.781324	71	6094	3.784902	72	6144	3.788451	70
6045	3.781396	72	6095	3.784974	71	6145	3.788522	71
6046	3.781468	72	6096	3.785045	72	6146	3.788593	71
6047	3.781540	72	6097	3.785116	71	6147	3.788663	70
6048	3.781612	72	6098	3.785187	72	6148	3.788734	71
6049	3.781684	72	6099	3.785259	71	6149	3.788804	70
6050	3.781755	71	6100	3.785330	72	6150	3.788875	71

Nomb.	1. 42' 30"	Dif.	Nomb.	1. 43' 20"	Dif.	Nomb.	1. 44' 10"	Dif.
6150	3.788875	71	6200	3.792392	70	6250	3.795880	69
6151	3.788946	70	6201	3.792462	70	6251	3.795949	70
6152	3.789016	71	6202	3.792532	70	6252	3.796019	69
6153	3.789087	70	6203	3.792602	70	6253	3.796088	70
6154	3.789157	71	6204	3.792672	70	6254	3.796158	69
6155	3.789228	70	6205	3.792742	70	6255	3.796227	70
6156	3.789299	71	6206	3.792812	70	6256	3.796297	69
6157	3.789369	70	6207	3.792882	70	6257	3.796366	70
6158	3.789440	71	6208	3.792952	70	6258	3.796436	69
6159	3.789510	70	6209	3.793022	70	6259	3.796505	70
6160	3.789581	71	6210	3.793092	69	6260	3.796574	69
6161	3.789651	70	6211	3.793162	70	6261	3.796644	69
6162	3.789722	71	6212	3.793231	69	6262	3.796713	70
6163	3.789792	70	6213	3.793301	70	6263	3.796782	69
6164	3.789863	71	6214	3.793371	70	6264	3.796852	69
6165	3.789933	70	6215	3.793441	70	6265	3.796921	70
6166	3.790004	71	6216	3.793511	69	6266	3.796990	69
6167	3.790074	70	6217	3.793581	70	6267	3.797060	69
6168	3.790144	71	6218	3.793651	70	6268	3.797129	70
6169	3.790215	70	6219	3.793721	69	6269	3.797198	69
6170	3.790285	71	6220	3.793790	70	6270	3.797268	69
6171	3.790356	70	6221	3.793860	70	6271	3.797337	70
6172	3.790426	71	6222	3.793930	69	6272	3.797406	69
6173	3.790496	70	6223	3.794000	70	6273	3.797475	69
6174	3.790567	71	6224	3.794070	70	6274	3.797545	69
6175	3.790637	70	6225	3.794139	69	6275	3.797614	70
6176	3.790707	71	6226	3.794209	70	6276	3.797683	69
6177	3.790778	70	6227	3.794279	70	6277	3.797752	69
6178	3.790848	71	6228	3.794349	69	6278	3.797821	70
6179	3.790918	70	6229	3.794418	70	6279	3.797890	69
6180	3.790988	71	6230	3.794488	69	6280	3.797960	69
6181	3.791059	70	6231	3.794558	70	6281	3.798029	69
6182	3.791129	71	6232	3.794627	69	6282	3.798098	70
6183	3.791199	70	6233	3.794697	70	6283	3.798167	69
6184	3.791269	71	6234	3.794767	69	6284	3.798236	69
6185	3.791340	70	6235	3.794836	70	6285	3.798305	69
6186	3.791410	71	6236	3.794906	69	6286	3.798374	70
6187	3.791480	70	6237	3.794976	70	6287	3.798443	69
6188	3.791550	71	6238	3.795045	69	6288	3.798513	69
6189	3.791620	70	6239	3.795115	70	6289	3.798582	69
6190	3.791691	71	6240	3.795185	69	6290	3.798651	70
6191	3.791761	70	6241	3.795254	70	6291	3.798720	69
6192	3.791831	71	6242	3.795324	69	6292	3.798789	69
6193	3.791901	70	6243	3.795393	70	6293	3.798858	69
6194	3.791971	71	6244	3.795463	69	6294	3.798927	69
6195	3.792041	70	6245	3.795532	70	6295	3.798996	69
6196	3.792111	71	6246	3.795602	69	6296	3.799065	70
6197	3.792181	70	6247	3.795672	70	6297	3.799134	69
6198	3.792252	71	6248	3.795741	69	6298	3.799203	69
6199	3.792322	70	6249	3.795811	70	6299	3.799272	69
6200	3.792392	71	6250	3.795880	69	6300	3.799341	69

Nomb.	1. 45' 0"	Dif.	Nomb.	1. 45' 50"	Dif.	Nomb.	1. 46' 40"	Dif.
6300	3.799341	68	6350	3.802774	68	6400	3.806180	68
6301	3.799409	69	6351	3.802842	68	6401	3.806248	68
6302	3.799478	69	6352	3.802910	69	6402	3.806316	68
6303	3.799547	69	6353	3.802979	68	6403	3.806384	67
6304	3.799616	69	6354	3.803047	69	6404	3.806451	68
6305	3.799685	69	6355	3.803116	68	6405	3.806519	68
6306	3.799754	69	6356	3.803184	68	6406	3.806587	68
6307	3.799823	69	6357	3.803252	69	6407	3.806655	68
6308	3.799892	69	6358	3.803321	68	6408	3.806723	67
6309	3.799961	68	6359	3.803389	68	6409	3.806790	68
6310	3.800029	69	6360	3.803457	68	6410	3.806858	68
6311	3.800098	69	6361	3.803525	69	6411	3.806926	68
6312	3.800167	69	6362	3.803594	68	6412	3.806994	67
6313	3.800236	69	6363	3.803662	68	6413	3.807061	68
6314	3.800305	68	6364	3.803730	68	6414	3.807129	68
6315	3.800373	69	6365	3.803798	69	6415	3.807197	67
6316	3.800442	69	6366	3.803867	68	6416	3.807264	68
6317	3.800511	69	6367	3.803935	68	6417	3.807332	68
6318	3.800580	68	6368	3.804003	68	6418	3.807400	67
6319	3.800648	69	6369	3.804071	68	6419	3.807467	68
6320	3.800717	69	6370	3.804139	69	6420	3.807535	68
6321	3.800786	68	6371	3.804208	68	6421	3.807603	67
6322	3.800854	69	6372	3.804276	68	6422	3.807670	68
6323	3.800923	69	6373	3.804344	68	6423	3.807738	68
6324	3.800992	69	6374	3.804412	68	6424	3.807806	67
6325	3.801061	68	6375	3.804480	68	6425	3.807873	68
6326	3.801129	69	6376	3.804548	68	6426	3.807941	67
6327	3.801198	68	6377	3.804616	69	6427	3.808008	68
6328	3.801266	69	6378	3.804685	68	6428	3.808076	67
6329	3.801335	69	6379	3.804753	68	6429	3.808143	68
6330	3.801404	68	6380	3.804821	68	6430	3.808211	68
6331	3.801472	69	6381	3.804889	68	6431	3.808279	67
6332	3.801541	68	6382	3.804957	68	6432	3.808346	68
6333	3.801609	69	6383	3.805025	68	6433	3.808414	67
6334	3.801678	69	6384	3.805093	68	6434	3.808481	68
6335	3.801747	68	6385	3.805161	68	6435	3.808549	67
6336	3.801815	69	6386	3.805229	68	6436	3.808616	68
6337	3.801884	68	6387	3.805297	68	6437	3.808684	67
6338	3.801952	69	6388	3.805365	68	6438	3.808751	67
6339	3.802021	68	6389	3.805433	68	6439	3.808818	68
6340	3.802089	69	6390	3.805501	68	6440	3.808886	67
6341	3.802158	68	6391	3.805569	68	6441	3.808953	68
6342	3.802226	69	6392	3.805637	68	6442	3.809021	67
6343	3.802295	68	6393	3.805705	68	6443	3.809088	68
6344	3.802363	69	6394	3.805773	68	6444	3.809156	67
6345	3.802432	68	6395	3.805841	67	6445	3.809223	67
6346	3.802500	68	6396	3.805908	68	6446	3.809290	68
6347	3.802568	69	6397	3.805976	68	6447	3.809358	67
6348	3.802637	68	6398	3.806044	68	6448	3.809425	67
6349	3.802705	69	6399	3.806112	68	6449	3.809492	68
6350	3.802774		6400	3.806180		6450	3.809560	

Nomb.	1. 47' 30"	Diff.	Nomb.	1. 48' 20"	Diff.	Nomb.	1. 49' 10"	Diff.
6450	3.809560		6500	3.812913	67	6550	3.816241	67
6451	3.809627	67	6501	3.812980	67	6551	3.816308	66
6452	3.809694	67	6502	3.813047	67	6552	3.816374	66
6453	3.809762	68	6503	3.813114	67	6553	3.816440	66
6454	3.809829	67	6504	3.813181	67	6554	3.816506	66
6455	3.809896	67	6505	3.813247	66	6555	3.816573	67
6456	3.809964	68	6506	3.813314	67	6556	3.816639	66
6457	3.810031	67	6507	3.813381	67	6557	3.816705	66
6458	3.810098	67	6508	3.813448	67	6558	3.816771	66
6459	3.810165	67	6509	3.813514	66	6559	3.816838	67
6460	3.810233	68	6510	3.813581	67	6560	3.816904	66
6461	3.810300	67	6511	3.813648	67	6561	3.816970	66
6462	3.810367	67	6512	3.813714	66	6562	3.817036	66
6463	3.810434	67	6513	3.813781	67	6563	3.817102	66
6464	3.810501	67	6514	3.813848	67	6564	3.817169	67
6465	3.810569	68	6515	3.813914	66	6565	3.817235	66
6466	3.810636	67	6516	3.813981	67	6566	3.817301	66
6467	3.810703	67	6517	3.814048	67	6567	3.817367	66
6468	3.810770	67	6518	3.814114	66	6568	3.817433	66
6469	3.810837	67	6519	3.814181	67	6569	3.817499	66
6470	3.810904	67	6520	3.814248	67	6570	3.817565	66
6471	3.810971	68	6521	3.814314	66	6571	3.817631	67
6472	3.811039	67	6522	3.814381	66	6572	3.817698	66
6473	3.811106	67	6523	3.814447	66	6573	3.817764	66
6474	3.811173	67	6524	3.814514	67	6574	3.817830	66
6475	3.811240	67	6525	3.814581	67	6575	3.817896	66
6476	3.811307	67	6526	3.814647	66	6576	3.817962	66
6477	3.811374	67	6527	3.814714	67	6577	3.818028	66
6478	3.811441	67	6528	3.814780	66	6578	3.818094	66
6479	3.811508	67	6529	3.814847	67	6579	3.818160	66
6480	3.811575	67	6530	3.814913	66	6580	3.818226	66
6481	3.811642	67	6531	3.814980	67	6581	3.818292	66
6482	3.811709	67	6532	3.815046	66	6582	3.818358	66
6483	3.811776	67	6533	3.815113	67	6583	3.818424	66
6484	3.811843	67	6534	3.815179	66	6584	3.818490	66
6485	3.811910	67	6535	3.815246	67	6585	3.818556	66
6486	3.811977	67	6536	3.815312	66	6586	3.818622	66
6487	3.812044	67	6537	3.815378	66	6587	3.818688	66
6488	3.812111	67	6538	3.815445	67	6588	3.818754	66
6489	3.812178	67	6539	3.815511	66	6589	3.818820	66
6490	3.812245	67	6540	3.815578	67	6590	3.818885	65
6491	3.812312	67	6541	3.815644	66	6591	3.818951	66
6492	3.812379	67	6542	3.815711	67	6592	3.819017	66
6493	3.812445	66	6543	3.815777	66	6593	3.819083	66
6494	3.812512	67	6544	3.815843	66	6594	3.819149	66
6495	3.812579	67	6545	3.815910	67	6595	3.819215	66
6496	3.812646	67	6546	3.815976	66	6596	3.819281	65
6497	3.812713	67	6547	3.816042	66	6597	3.819346	66
6498	3.812780	67	6548	3.816109	67	6598	3.819412	66
6499	3.812847	67	6549	3.816175	66	6599	3.819478	66
6500	3.812913	66	6550	3.816241	66	6600	3.819544	66

Nomb.	1. 50' 0"	Dif.	Nomb.	1. 50' 50"	Dif.	Nomb.	1. 51' 40"	Dif.
	Logarith.			Logarith.			Logarith.	
6600	3.819544	66	6650	3.822822	65	6700	3.826075	65
6601	3.819610	66	6651	3.822887	65	6701	3.826140	64
6602	3.819676	65	6652	3.822952	66	6702	3.826204	65
6603	3.819741	66	6653	3.823018	65	6703	3.826269	65
6604	3.819807	66	6654	3.823083	65	6704	3.826334	65
6605	3.819873	66	6655	3.823148	65	6705	3.826399	65
6606	3.819939	66	6656	3.823213	65	6706	3.826464	64
6607	3.820004	65	6657	3.823279	66	6707	3.826528	65
6608	3.820070	66	6658	3.823344	65	6708	3.826593	65
6609	3.820136	65	6659	3.823409	65	6709	3.826658	65
6610	3.820201	66	6660	3.823474	65	6710	3.826723	64
6611	3.820267	66	6661	3.823539	66	6711	3.826787	65
6612	3.820333	66	6662	3.823605	65	6712	3.826852	65
6613	3.820399	65	6663	3.823670	65	6713	3.826917	64
6614	3.820464	66	6664	3.823735	65	6714	3.826981	65
6615	3.820530	65	6665	3.823800	65	6715	3.827046	65
6616	3.820595	66	6666	3.823865	65	6716	3.827111	64
6617	3.820661	66	6667	3.823930	66	6717	3.827175	65
6618	3.820727	65	6668	3.823996	65	6718	3.827240	65
6619	3.820792	66	6669	3.824061	65	6719	3.827305	64
6620	3.820858	66	6670	3.824126	65	6720	3.827369	65
6621	3.820924	65	6671	3.824191	65	6721	3.827434	65
6622	3.820989	66	6672	3.824256	65	6722	3.827499	64
6623	3.821055	65	6673	3.824321	65	6723	3.827563	65
6624	3.821120	66	6674	3.824386	65	6724	3.827628	64
6625	3.821186	65	6675	3.824451	65	6725	3.827692	65
6626	3.821251	66	6676	3.824516	65	6726	3.827757	64
6627	3.821317	65	6677	3.824581	65	6727	3.827821	65
6628	3.821382	66	6678	3.824646	65	6728	3.827886	65
6629	3.821448	66	6679	3.824711	65	6729	3.827951	64
6630	3.821514	65	6680	3.824776	65	6730	3.828015	65
6631	3.821579	66	6681	3.824841	65	6731	3.828080	64
6632	3.821645	65	6682	3.824906	65	6732	3.828144	65
6633	3.821710	65	6683	3.824971	65	6733	3.828209	64
6634	3.821775	66	6684	3.825036	65	6734	3.828273	65
6635	3.821841	65	6685	3.825101	65	6735	3.828338	64
6636	3.821906	66	6686	3.825166	65	6736	3.828402	65
6637	3.821972	65	6687	3.825231	65	6737	3.828467	64
6638	3.822037	66	6688	3.825296	65	6738	3.828531	64
6639	3.822103	65	6689	3.825361	65	6739	3.828595	65
6640	3.822168	65	6690	3.825426	65	6740	3.828660	64
6641	3.822233	66	6691	3.825491	65	6741	3.828724	65
6642	3.822299	65	6692	3.825556	65	6742	3.828789	64
6643	3.822364	66	6693	3.825621	65	6743	3.828853	65
6644	3.822430	65	6694	3.825686	65	6744	3.828918	64
6645	3.822495	65	6695	3.825751	64	6745	3.828982	64
6646	3.822560	66	6696	3.825815	65	6746	3.829046	65
6647	3.822626	65	6697	3.825880	65	6747	3.829111	64
6648	3.822691	65	6698	3.825945	65	6748	3.829175	64
6649	3.822756	66	6699	3.826010	65	6749	3.829239	65
6650	3.822822	66	6700	3.826075	65	6750	3.829304	65

Nomb.	1. 52' 30"	Dif.	Nomb.	1. 53' 20"	Dif.	Nomb.	1. 54' 10"	Dif.
	Logarith.			Logarith.			Logarith.	
6750	3.829304	64	6800	3.832509	64	6850	3.835691	63
6751	3.829368	64	6801	3.832573	64	6851	3.835754	63
6752	3.829432	64	6802	3.832637	63	6852	3.835817	64
6753	3.829497	64	6803	3.832700	64	6853	3.835881	63
6754	3.829561	64	6804	3.832764	64	6854	3.835944	63
6755	3.829625	65	6805	3.832828	64	6855	3.836007	64
6756	3.829690	64	6806	3.832892	64	6856	3.836071	63
6757	3.829754	64	6807	3.832956	64	6857	3.836134	63
6758	3.829818	64	6808	3.833020	64	6858	3.836197	64
6759	3.829882	65	6809	3.833083	63	6859	3.836261	63
6760	3.829947	64	6810	3.833147	64	6860	3.836324	63
6761	3.830011	64	6811	3.833211	64	6861	3.836387	64
6762	3.830075	64	6812	3.833275	63	6862	3.836451	63
6763	3.830139	65	6813	3.833338	64	6863	3.836514	63
6764	3.830204	64	6814	3.833402	64	6864	3.836577	64
6765	3.830268	64	6815	3.833466	64	6865	3.836641	63
6766	3.830332	64	6816	3.833530	64	6866	3.836704	63
6767	3.830396	64	6817	3.833593	63	6867	3.836767	63
6768	3.830460	64	6818	3.833657	64	6868	3.836830	64
6769	3.830525	65	6819	3.833721	63	6869	3.836894	63
6770	3.830589	64	6820	3.833784	64	6870	3.836957	63
6771	3.830653	64	6821	3.833848	64	6871	3.837020	63
6772	3.830717	64	6822	3.833912	64	6872	3.837083	63
6773	3.830781	64	6823	3.833975	63	6873	3.837146	64
6774	3.830845	64	6824	3.834039	64	6874	3.837210	63
6775	3.830909	64	6825	3.834103	63	6875	3.837273	63
6776	3.830973	64	6826	3.834166	64	6876	3.837336	63
6777	3.831037	65	6827	3.834230	64	6877	3.837399	63
6778	3.831102	64	6828	3.834294	63	6878	3.837462	63
6779	3.831166	64	6829	3.834357	64	6879	3.837525	63
6780	3.831230	64	6830	3.834421	63	6880	3.837588	64
6781	3.831294	64	6831	3.834484	64	6881	3.837652	63
6782	3.831358	64	6832	3.834548	63	6882	3.837715	63
6783	3.831422	64	6833	3.834611	64	6883	3.837778	63
6784	3.831486	64	6834	3.834675	64	6884	3.837841	63
6785	3.831550	64	6835	3.834739	63	6885	3.837904	63
6786	3.831614	64	6836	3.834802	64	6886	3.837967	63
6787	3.831678	64	6837	3.834866	63	6887	3.838030	63
6788	3.831742	64	6838	3.834929	64	6888	3.838093	63
6789	3.831806	64	6839	3.834993	63	6889	3.838156	63
6790	3.831870	64	6840	3.835056	64	6890	3.838219	63
6791	3.831934	64	6841	3.835120	63	6891	3.838282	63
6792	3.831998	64	6842	3.835183	64	6892	3.838345	63
6793	3.832062	64	6843	3.835247	63	6893	3.838408	63
6794	3.832126	63	6844	3.835310	64	6894	3.838471	63
6795	3.832189	64	6845	3.835373	64	6895	3.838534	63
6796	3.832253	64	6846	3.835437	64	6896	3.838597	63
6797	3.832317	64	6847	3.835500	63	6897	3.838660	63
6798	3.832381	64	6848	3.835564	63	6898	3.838723	63
6799	3.832445	64	6849	3.835627	64	6899	3.838786	63
6800	3.832509	64	6850	3.835691	64	6900	3.838849	63

Nomb.	1. 55' 0"	Dif.	Nomb.	1. 55' 50"	Dif.	Nomb.	1. 56' 40"	Dif.
	Logarith.			Logarith.			Logarith.	
6900	3.838849	63	6950	3.841985	62	7000	3.845098	62
6901	3.838912	63	6951	3.842047	63	7001	3.845160	62
6902	3.838975	63	6952	3.842110	62	7002	3.845222	62
6903	3.839038	63	6953	3.842172	63	7003	3.845284	62
6904	3.839101	63	6954	3.842235	63	7004	3.845346	62
6905	3.839164	63	6955	3.842297	62	7005	3.845408	62
6906	3.839227	63	6956	3.842360	63	7006	3.845470	62
6907	3.839289	62	6957	3.842422	62	7007	3.845532	62
6908	3.839352	63	6958	3.842484	62	7008	3.845594	62
6909	3.839415	63	6959	3.842547	63	7009	3.845656	62
6910	3.839478	63	6960	3.842609	62	7010	3.845718	62
6911	3.839541	63	6961	3.842672	63	7011	3.845780	62
6912	3.839604	63	6962	3.842734	62	7012	3.845842	62
6913	3.839667	63	6963	3.842796	62	7013	3.845904	62
6914	3.839729	62	6964	3.842859	63	7014	3.845966	62
6915	3.839792	63	6965	3.842921	62	7015	3.846028	62
6916	3.839855	63	6966	3.842983	62	7016	3.846090	62
6917	3.839918	63	6967	3.843046	63	7017	3.846151	61
6918	3.839981	62	6968	3.843108	62	7018	3.846213	62
6919	3.840043	63	6969	3.843170	62	7019	3.846275	62
6920	3.840106	63	6970	3.843233	63	7020	3.846337	62
6921	3.840169	63	6971	3.843295	62	7021	3.846399	62
6922	3.840232	63	6972	3.843357	62	7022	3.846461	62
6923	3.840294	62	6973	3.843420	63	7023	3.846523	62
6924	3.840357	63	6974	3.843482	62	7024	3.846585	62
6925	3.840420	63	6975	3.843544	62	7025	3.846646	61
6926	3.840482	62	6976	3.843606	62	7026	3.846708	62
6927	3.840545	63	6977	3.843669	63	7027	3.846770	62
6928	3.840608	63	6978	3.843731	62	7028	3.846832	62
6929	3.840671	63	6979	3.843793	62	7029	3.846894	62
6930	3.840733	62	6980	3.843855	61	7030	3.846955	61
6931	3.840796	63	6981	3.843918	63	7031	3.847017	62
6932	3.840859	63	6982	3.843980	62	7032	3.847079	62
6933	3.840921	62	6983	3.844042	62	7033	3.847141	62
6934	3.840984	63	6984	3.844104	62	7034	3.847202	61
6935	3.841046	62	6985	3.844166	62	7035	3.847264	62
6936	3.841109	63	6986	3.844229	63	7036	3.847326	62
6937	3.841172	63	6987	3.844291	62	7037	3.847388	62
6938	3.841234	62	6988	3.844353	62	7038	3.847449	61
6939	3.841297	63	6989	3.844415	62	7039	3.847511	62
6940	3.841359	62	6990	3.844477	62	7040	3.847573	62
6941	3.841422	63	6991	3.844539	62	7041	3.847634	61
6942	3.841485	63	6992	3.844601	63	7042	3.847696	62
6943	3.841547	62	6993	3.844664	62	7043	3.847758	62
6944	3.841610	63	6994	3.844726	62	7044	3.847819	61
6945	3.841672	62	6995	3.844788	62	7045	3.847881	62
6946	3.841735	63	6996	3.844850	62	7046	3.847943	62
6947	3.841797	62	6997	3.844912	63	7047	3.848004	61
6948	3.841860	63	6998	3.844974	62	7048	3.848066	62
6949	3.841922	62	6999	3.845036	62	7049	3.848128	62
6950	3.841985	63	7000	3.845098	62	7050	3.848189	61

Nomb.	1. 57' 30"	Dif.	Nomb.	1. 58' 20"	Dif.	Nomb.	1. 59' 10"	Dif.
7050	3.848189	62	7100	3.851258	62	7150	3.854306	61
7051	3.848251	61	7101	3.851320	61	7151	3.854367	61
7052	3.848312	62	7102	3.851381	61	7152	3.854428	60
7053	3.848374	61	7103	3.851442	61	7153	3.854488	61
7054	3.848435	62	7104	3.851503	61	7154	3.854549	61
7055	3.848497	62	7105	3.851564	61	7155	3.854610	60
7056	3.848559	61	7106	3.851625	61	7156	3.854670	61
7057	3.848620	62	7107	3.851686	61	7157	3.854731	61
7058	3.848682	61	7108	3.851747	62	7158	3.854792	60
7059	3.848743	62	7109	3.851809	61	7159	3.854852	61
7060	3.848805	61	7110	3.851870	61	7160	3.854913	61
7061	3.848866	62	7111	3.851931	61	7161	3.854974	60
7062	3.848928	61	7112	3.851992	61	7162	3.855034	61
7063	3.848989	62	7113	3.852053	61	7163	3.855095	61
7064	3.849051	61	7114	3.852114	61	7164	3.855156	60
7065	3.849112	62	7115	3.852175	61	7165	3.855216	61
7066	3.849174	61	7116	3.852236	61	7166	3.855277	60
7067	3.849235	62	7117	3.852297	61	7167	3.855337	61
7068	3.849297	61	7118	3.852358	61	7168	3.855398	61
7069	3.849358	61	7119	3.852419	61	7169	3.855459	60
7070	3.849419	62	7120	3.852480	61	7170	3.855519	61
7071	3.849481	61	7121	3.852541	61	7171	3.855580	60
7072	3.849542	62	7122	3.852602	61	7172	3.855640	61
7073	3.849604	61	7123	3.852663	61	7173	3.855701	60
7074	3.849665	61	7124	3.852724	61	7174	3.855761	61
7075	3.849726	62	7125	3.852785	61	7175	3.855822	60
7076	3.849788	61	7126	3.852846	61	7176	3.855882	61
7077	3.849849	62	7127	3.852907	61	7177	3.855943	60
7078	3.849911	61	7128	3.852968	61	7178	3.856003	61
7079	3.849972	61	7129	3.853029	61	7179	3.856064	60
7080	3.850033	62	7130	3.853090	60	7180	3.856124	61
7081	3.850095	61	7131	3.853150	61	7181	3.856185	60
7082	3.850156	61	7132	3.853211	61	7182	3.856245	61
7083	3.850217	62	7133	3.853272	61	7183	3.856306	60
7084	3.850279	61	7134	3.853333	61	7184	3.856366	61
7085	3.850340	61	7135	3.853394	61	7185	3.856427	60
7086	3.850401	61	7136	3.853455	61	7186	3.856487	61
7087	3.850462	62	7137	3.853516	61	7187	3.856548	60
7088	3.850524	61	7138	3.853577	60	7188	3.856608	60
7089	3.850585	61	7139	3.853637	61	7189	3.856668	61
7090	3.850646	61	7140	3.853698	61	7190	3.856729	60
7091	3.850707	62	7141	3.853759	61	7191	3.856789	61
7092	3.850769	61	7142	3.853820	61	7192	3.856850	60
7093	3.850830	61	7143	3.853881	60	7193	3.856910	60
7094	3.850891	61	7144	3.853941	61	7194	3.856970	61
7095	3.850952	62	7145	3.854002	61	7195	3.857031	60
7096	3.851014	61	7146	3.854063	61	7196	3.857091	61
7097	3.851075	61	7147	3.854124	61	7197	3.857152	60
7098	3.851136	61	7148	3.854185	60	7198	3.857212	60
7099	3.851197	61	7149	3.854245	61	7199	3.857272	60
7100	3.851258	61	7150	3.854306	61	7200	3.857332	60

Nomb.	2. 0' 0"	Dif.	Nomb.	2. 0' 50"	Dif.	Nomb.	2. 1' 40"	Dif.
7200	3.857332	61	7250	3.860338	60	7300	3.863323	59
7201	3.857393	60	7251	3.860398	60	7301	3.863382	60
7202	3.857453	60	7252	3.860458	60	7302	3.863442	59
7203	3.857513	61	7253	3.860518	60	7303	3.863501	60
7204	3.857574	60	7254	3.860578	59	7304	3.863561	59
7205	3.857634	60	7255	3.860637	60	7305	3.863620	60
7206	3.857694	61	7256	3.860697	60	7306	3.863680	59
7207	3.857755	60	7257	3.860757	60	7307	3.863739	60
7208	3.857815	60	7258	3.860817	60	7308	3.863799	59
7209	3.857875	60	7259	3.860877	60	7309	3.863858	59
7210	3.857935	60	7260	3.860937	59	7310	3.863917	59
7211	3.857995	61	7261	3.860996	60	7311	3.863977	59
7212	3.858056	60	7262	3.861056	60	7312	3.864036	60
7213	3.858116	60	7263	3.861116	60	7313	3.864096	59
7214	3.858176	60	7264	3.861176	60	7314	3.864155	59
7215	3.858236	61	7265	3.861236	59	7315	3.864214	60
7216	3.858297	60	7266	3.861295	60	7316	3.864274	59
7217	3.858357	60	7267	3.861356	60	7317	3.864333	59
7218	3.858417	60	7268	3.861415	60	7318	3.864392	60
7219	3.858477	60	7269	3.861475	59	7319	3.864452	59
7220	3.858537	60	7270	3.861534	60	7320	3.864511	59
7221	3.858597	60	7271	3.861594	60	7321	3.864570	60
7222	3.858657	61	7272	3.861654	60	7322	3.864630	59
7223	3.858718	60	7273	3.861714	59	7323	3.864689	59
7224	3.858778	60	7274	3.861773	60	7324	3.864748	60
7225	3.858838	60	7275	3.861833	60	7325	3.864808	59
7226	3.858898	60	7276	3.861893	59	7326	3.864867	59
7227	3.858958	60	7277	3.861952	60	7327	3.864926	59
7228	3.859018	60	7278	3.862012	60	7328	3.864985	60
7229	3.859078	60	7279	3.862072	59	7329	3.865045	59
7230	3.859138	60	7280	3.862131	60	7330	3.865104	59
7231	3.859198	60	7281	3.862191	60	7331	3.865163	59
7232	3.859258	60	7282	3.862251	59	7332	3.865222	60
7233	3.859318	61	7283	3.862310	60	7333	3.865282	59
7234	3.859379	60	7284	3.862370	60	7334	3.865341	59
7235	3.859439	60	7285	3.862430	59	7335	3.865400	59
7236	3.859499	60	7286	3.862489	60	7336	3.865459	60
7237	3.859559	60	7287	3.862549	59	7337	3.865519	59
7238	3.859619	60	7288	3.862608	60	7338	3.865578	59
7239	3.859679	60	7289	3.862668	60	7339	3.865637	59
7240	3.859739	60	7290	3.862728	59	7340	3.865696	59
7241	3.859799	60	7291	3.862787	60	7341	3.865755	59
7242	3.859859	59	7292	3.862847	59	7342	3.865814	60
7243	3.859918	60	7293	3.862906	60	7343	3.865874	59
7244	3.859978	60	7294	3.862966	59	7344	3.865933	59
7245	3.860038	60	7295	3.863025	59	7345	3.865992	59
7246	3.860098	60	7296	3.863085	60	7346	3.866051	59
7247	3.860158	60	7297	3.863144	60	7347	3.866110	59
7248	3.860218	60	7298	3.863204	59	7348	3.866169	59
7249	3.860278	60	7299	3.863263	60	7349	3.866228	59
7250	3.860338		7300	3.863323		7350	3.866287	59

Nomb.	2. 2° 30'	Dif.	Nomb.	2. 3° 20'	Dif.	Nomb.	2. 4° 10'	Dif.
	Logarith.			Logarith.			Logarith.	
7350	3.866287	59	7400	3.869232	58	7450	3.872156	59
7351	3.866346	59	7401	3.869290	59	7451	3.872215	58
7352	3.866405	60	7402	3.869349	59	7452	3.872273	58
7353	3.866465	59	7403	3.869408	58	7453	3.872331	58
7354	3.866524	59	7404	3.869466	59	7454	3.872389	59
7355	3.866583	59	7405	3.869525	59	7455	3.872448	58
7356	3.866642	59	7406	3.869584	58	7456	3.872506	58
7357	3.866701	59	7407	3.869642	59	7457	3.872564	58
7358	3.866760	59	7408	3.869701	59	7458	3.872622	59
7359	3.866819	59	7409	3.869760	58	7459	3.872681	58
7360	3.866878	59	7410	3.869818	59	7460	3.872739	58
7361	3.866937	59	7411	3.869877	58	7461	3.872797	58
7362	3.866996	59	7412	3.869935	59	7462	3.872855	58
7363	3.867055	59	7413	3.869994	59	7463	3.872913	59
7364	3.867114	59	7414	3.870053	58	7464	3.872972	58
7365	3.867173	59	7415	3.870111	59	7465	3.873030	58
7366	3.867232	59	7416	3.870170	58	7466	3.873088	58
7367	3.867291	59	7417	3.870228	59	7467	3.873146	58
7368	3.867350	59	7418	3.870287	58	7468	3.873204	58
7369	3.867409	58	7419	3.870345	59	7469	3.873262	59
7370	3.867467	59	7420	3.870404	58	7470	3.873321	58
7371	3.867526	59	7421	3.870462	59	7471	3.873379	58
7372	3.867585	59	7422	3.870521	58	7472	3.873437	58
7373	3.867644	59	7423	3.870579	59	7473	3.873495	58
7374	3.867703	59	7424	3.870638	58	7474	3.873553	58
7375	3.867762	59	7425	3.870696	59	7475	3.873611	58
7376	3.867821	59	7426	3.870755	58	7476	3.873669	58
7377	3.867880	59	7427	3.870813	59	7477	3.873727	58
7378	3.867939	59	7428	3.870872	58	7478	3.873785	59
7379	3.867998	58	7429	3.870930	59	7479	3.873844	58
7380	3.868056	59	7430	3.870989	58	7480	3.873902	58
7381	3.868115	59	7431	3.871047	59	7481	3.873960	58
7382	3.868174	59	7432	3.871106	58	7482	3.874018	58
7383	3.868233	59	7433	3.871164	59	7483	3.874076	58
7384	3.868292	58	7434	3.871223	58	7484	3.874134	58
7385	3.868350	59	7435	3.871281	58	7485	3.874192	58
7386	3.868409	59	7436	3.871339	59	7486	3.874250	58
7387	3.868468	59	7437	3.871398	58	7487	3.874308	58
7388	3.868527	59	7438	3.871456	59	7488	3.874366	58
7389	3.868586	58	7439	3.871515	58	7489	3.874424	58
7390	3.868644	59	7440	3.871573	58	7490	3.874482	58
7391	3.868703	59	7441	3.871631	59	7491	3.874540	58
7392	3.868762	59	7442	3.871690	58	7492	3.874598	58
7393	3.868821	58	7443	3.871748	58	7493	3.874656	58
7394	3.868879	59	7444	3.871806	59	7494	3.874714	58
7395	3.868938	59	7445	3.871865	58	7495	3.874772	58
7396	3.868997	59	7446	3.871923	58	7496	3.874830	58
7397	3.869056	58	7447	3.871981	59	7497	3.874888	57
7398	3.869114	59	7448	3.872040	58	7498	3.874945	58
7399	3.869173	59	7449	3.872098	58	7499	3.875003	58
7400	3.869232	59	7450	3.872156	58	7500	3.875061	58

Nomb.	2. 5' 0"	Dif.	Nomb.	2. 5' 50"	Dif.	Nomb.	2. 6' 40"	Dif.
Logarith.			Logarith.			Logarith.		
7500	3.875061	58	7550	3.877947	57	7600	3.880814	57
7501	3.875119	58	7551	3.878004	58	7601	3.880871	57
7502	3.875177	58	7552	3.878062	57	7602	3.880928	57
7503	3.875235	58	7553	3.878119	58	7603	3.880985	57
7504	3.875293	58	7554	3.878177	58	7604	3.881042	57
7505	3.875351	58	7555	3.878234	57	7605	3.881099	57
7506	3.875409	57	7556	3.878292	58	7606	3.881156	57
7507	3.875466	58	7557	3.878349	58	7607	3.881213	57
7508	3.875524	58	7558	3.878407	57	7608	3.881271	58
7509	3.875582	58	7559	3.878464	58	7609	3.881328	57
7510	3.875640	58	7560	3.878522	57	7610	3.881385	57
7511	3.875698	58	7561	3.878579	58	7611	3.881442	57
7512	3.875756	57	7562	3.878637	57	7612	3.881499	57
7513	3.875813	58	7563	3.878694	58	7613	3.881556	57
7514	3.875871	58	7564	3.878752	57	7614	3.881613	57
7515	3.875929	58	7565	3.878809	57	7615	3.881670	57
7516	3.875987	58	7566	3.878866	58	7616	3.881727	57
7517	3.876045	57	7567	3.878924	57	7617	3.881784	57
7518	3.876102	58	7568	3.878981	58	7618	3.881841	57
7519	3.876160	58	7569	3.879039	57	7619	3.881898	57
7520	3.876218	58	7570	3.879096	57	7620	3.881955	57
7521	3.876276	58	7571	3.879153	58	7621	3.882012	57
7522	3.876333	57	7572	3.879211	57	7622	3.882069	57
7523	3.876391	58	7573	3.879268	57	7623	3.882126	57
7524	3.876449	58	7574	3.879325	58	7624	3.882183	57
7525	3.876507	57	7575	3.879383	57	7625	3.882240	57
7526	3.876564	58	7576	3.879440	58	7626	3.882297	57
7527	3.876622	58	7577	3.879497	57	7627	3.882354	57
7528	3.876680	57	7578	3.879555	57	7628	3.882411	57
7529	3.876737	58	7579	3.879612	57	7629	3.882468	57
7530	3.876795	58	7580	3.879669	57	7630	3.882525	57
7531	3.876853	57	7581	3.879726	58	7631	3.882581	56
7532	3.876910	58	7582	3.879784	57	7632	3.882638	57
7533	3.876968	58	7583	3.879841	57	7633	3.882695	57
7534	3.877026	57	7584	3.879898	58	7634	3.882752	57
7535	3.877083	58	7585	3.879956	57	7635	3.882809	57
7536	3.877141	58	7586	3.880013	57	7636	3.882866	57
7537	3.877199	57	7587	3.880070	57	7637	3.882923	57
7538	3.877256	58	7588	3.880127	58	7638	3.882980	57
7539	3.877314	57	7589	3.880185	57	7639	3.883037	57
7540	3.877371	58	7590	3.880242	57	7640	3.883093	56
7541	3.877429	58	7591	3.880299	57	7641	3.883150	57
7542	3.877487	57	7592	3.880356	57	7642	3.883207	57
7543	3.877544	58	7593	3.880413	58	7643	3.883264	57
7544	3.877602	57	7594	3.880471	57	7644	3.883321	57
7545	3.877659	58	7595	3.880528	57	7645	3.883377	56
7546	3.877717	58	7596	3.880585	57	7646	3.883434	57
7547	3.877774	57	7597	3.880642	57	7647	3.883491	57
7548	3.877832	58	7598	3.880699	57	7648	3.883548	57
7549	3.877889	57	7599	3.880756	57	7649	3.883605	57
7550	3.877947	58	7600	3.880814	58	7650	3.883661	56

Nomb.	2. 7' 30"	Dif.	Nomb.	2. 8' 20"	Dif.	Nomb.	2. 9' 10"	Dif.
Logarith.			Logarith.			Logarith.		
7650	3.883661		7700	3.886491	56	7750	3.889302	56
7651	3.883718	57	7701	3.886547	57	7751	3.889358	56
7652	3.883775	57	7702	3.886604	56	7752	3.889414	56
7653	3.883832	57	7703	3.886660	56	7753	3.889470	56
7654	3.883888	56	7704	3.886716	56	7754	3.889526	56
		57			57			56
7655	3.883945	57	7705	3.886773	56	7755	3.889582	56
7656	3.884002	57	7706	3.886829	56	7756	3.889638	56
7657	3.884059	57	7707	3.886885	56	7757	3.889694	56
7658	3.884115	56	7708	3.886942	57	7758	3.889750	56
7659	3.884172	57	7709	3.886998	56	7759	3.889806	56
		57			56			56
7660	3.884229	56	7710	3.887054	57	7760	3.889862	56
7661	3.884285	57	7711	3.887111	56	7761	3.889918	56
7662	3.884342	57	7712	3.887167	56	7762	3.889974	56
7663	3.884399	57	7713	3.887223	56	7763	3.890030	56
7664	3.884455	56	7714	3.887280	57	7764	3.890086	56
		57			56			55
7665	3.884512	57	7715	3.887336	56	7765	3.890141	56
7666	3.884569	57	7716	3.887392	56	7766	3.890197	56
7667	3.884625	56	7717	3.887448	56	7767	3.890253	56
7668	3.884682	57	7718	3.887505	57	7768	3.890309	56
7669	3.884739	57	7719	3.887561	56	7769	3.890365	56
		56			56			56
7670	3.884795	57	7720	3.887617	57	7770	3.890421	56
7671	3.884852	57	7721	3.887674	57	7771	3.890477	56
7672	3.884909	57	7722	3.887730	56	7772	3.890533	56
7673	3.884965	56	7723	3.887786	56	7773	3.890589	56
7674	3.885022	57	7724	3.887842	56	7774	3.890645	56
		56			56			55
7675	3.885078	57	7725	3.887898	57	7775	3.890700	56
7676	3.885135	57	7726	3.887955	57	7776	3.890756	56
7677	3.885192	57	7727	3.888011	56	7777	3.890812	56
7678	3.885248	56	7728	3.888067	56	7778	3.890868	56
7679	3.885305	57	7729	3.888123	56	7779	3.890924	56
		56			56			56
7680	3.885361	57	7730	3.888179	57	7780	3.890980	55
7681	3.885418	56	7731	3.888236	56	7781	3.891035	56
7682	3.885474	57	7732	3.888292	56	7782	3.891091	56
7683	3.885531	56	7733	3.888348	56	7783	3.891147	56
7684	3.885587	56	7734	3.888404	56	7784	3.891203	56
		57			56			56
7685	3.885644	56	7735	3.888460	56	7785	3.891259	55
7686	3.885700	56	7736	3.888516	56	7786	3.891314	56
7687	3.885757	57	7737	3.888573	57	7787	3.891370	56
7688	3.885813	56	7738	3.888629	56	7788	3.891426	56
7689	3.885870	57	7739	3.888685	56	7789	3.891482	56
		56			56			55
7690	3.885926	57	7740	3.888741	56	7790	3.891537	56
7691	3.885983	56	7741	3.888797	56	7791	3.891593	56
7692	3.886039	57	7742	3.888853	56	7792	3.891649	56
7693	3.886096	56	7743	3.888909	56	7793	3.891705	55
7694	3.886152	56	7744	3.888965	56	7794	3.891760	56
		57			56			56
7695	3.886209	56	7745	3.889021	56	7795	3.891816	56
7696	3.886265	56	7746	3.889077	57	7796	3.891872	56
7697	3.886321	57	7747	3.889134	56	7797	3.891928	55
7698	3.886378	56	7748	3.889190	56	7798	3.891983	56
7699	3.886434	56	7749	3.889246	56	7799	3.892039	56
7700	3.886491	57	7750	3.889302	56	7800	3.892095	56

Nomb.	2. 10' 0"	Dif.	Nomb.	2. 10' 50"	Dif.	Nomb.	2. 11' 40"	Dif.
7800	3.892095	55	7850	3.894870	55	7900	3.897627	55
7801	3.892150	56	7851	3.894925	55	7901	3.897682	55
7802	3.892206	56	7852	3.894980	56	7902	3.897737	55
7803	3.892262	55	7853	3.895036	55	7903	3.897792	55
7804	3.892317	56	7854	3.895091	55	7904	3.897847	55
7805	3.892373	56	7855	3.895146	55	7905	3.897902	55
7806	3.892429	55	7856	3.895201	56	7906	3.897957	55
7807	3.892484	56	7857	3.895257	55	7907	3.898012	55
7808	3.892540	55	7858	3.895312	55	7908	3.898067	55
7809	3.892595	56	7859	3.895367	56	7909	3.898122	54
7810	3.892651	56	7860	3.895423	55	7910	3.898176	55
7811	3.892707	55	7861	3.895478	55	7911	3.898231	55
7812	3.892762	56	7862	3.895533	55	7912	3.898286	55
7813	3.892818	55	7863	3.895588	56	7913	3.898341	55
7814	3.892873	56	7864	3.895644	55	7914	3.898396	55
7815	3.892929	56	7865	3.895699	55	7915	3.898451	55
7816	3.892985	55	7866	3.895754	55	7916	3.898506	55
7817	3.893040	56	7867	3.895809	55	7917	3.898561	54
7818	3.893096	55	7868	3.895864	56	7918	3.898615	55
7819	3.893151	56	7869	3.895920	55	7919	3.898670	55
7820	3.893207	55	7870	3.895975	55	7920	3.898725	55
7821	3.893262	56	7871	3.896030	55	7921	3.898780	55
7822	3.893318	55	7872	3.896085	55	7922	3.898835	55
7823	3.893373	56	7873	3.896140	55	7923	3.898890	54
7824	3.893429	55	7874	3.896195	56	7924	3.898944	55
7825	3.893484	56	7875	3.896251	55	7925	3.898999	55
7826	3.893540	55	7876	3.896306	55	7926	3.899054	55
7827	3.893595	56	7877	3.896361	55	7927	3.899109	55
7828	3.893651	55	7878	3.896416	55	7928	3.899164	54
7829	3.893706	56	7879	3.896471	55	7929	3.899218	55
7830	3.893762	55	7880	3.896526	55	7930	3.899273	55
7831	3.893817	56	7881	3.896581	55	7931	3.899328	55
7832	3.893873	55	7882	3.896636	56	7932	3.899383	54
7833	3.893928	56	7883	3.896692	55	7933	3.899437	55
7834	3.893984	55	7884	3.896747	55	7934	3.899492	55
7835	3.894039	55	7885	3.896802	55	7935	3.899547	55
7836	3.894094	56	7886	3.896857	55	7936	3.899602	54
7837	3.894150	55	7887	3.896912	55	7937	3.899656	55
7838	3.894205	56	7888	3.896967	55	7938	3.899711	55
7839	3.894261	55	7889	3.897022	55	7939	3.899766	55
7840	3.894316	55	7890	3.897077	55	7940	3.899821	54
7841	3.894371	56	7891	3.897132	55	7941	3.899875	55
7842	3.894427	55	7892	3.897187	55	7942	3.899930	55
7843	3.894482	56	7893	3.897242	55	7943	3.899985	54
7844	3.894538	55	7894	3.897297	55	7944	3.900039	55
7845	3.894593	55	7895	3.897352	55	7945	3.900094	55
7846	3.894648	56	7896	3.897407	55	7946	3.900149	54
7847	3.894704	55	7897	3.897462	55	7947	3.900203	55
7848	3.894759	55	7898	3.897517	55	7948	3.900258	54
7849	3.894814	56	7899	3.897572	55	7949	3.900312	55
7850	3.894870	55	7900	3.897627	55	7950	3.900367	55

Nomb.	2. 12' 30"	Dif.	Nomb.	2. 13' 20"	Dif.	Nomb.	2. 14' 10"	Dif.
Logarith.			Logarith.			Logarith.		
7950	3.900367		8000	3.903090		8050	3.905796	
7951	3.900422	55	8001	3.903144	54	8051	3.905850	54
7952	3.900476	54	8002	3.903199	55	8052	3.905904	54
7953	3.900531	55	8003	3.903253	54	8053	3.905958	54
7954	3.900586	54	8004	3.903307	54	8054	3.906012	54
7955	3.900640	55	8005	3.903361	54	8055	3.906066	54
7956	3.900695	54	8006	3.903416	55	8056	3.906119	53
7957	3.900749	54	8007	3.903470	54	8057	3.906173	54
7958	3.900804	55	8008	3.903524	54	8058	3.906227	54
7959	3.900859	54	8009	3.903578	54	8059	3.906281	54
7960	3.900913	55	8010	3.903633	55	8060	3.906335	54
7961	3.900968	54	8011	3.903687	54	8061	3.906389	54
7962	3.901022	55	8012	3.903741	54	8062	3.906443	54
7963	3.901077	54	8013	3.903795	54	8063	3.906497	54
7964	3.901131	55	8014	3.903849	55	8064	3.906551	53
7965	3.901186	54	8015	3.903904	54	8065	3.906604	54
7966	3.901240	55	8016	3.903958	54	8066	3.906658	54
7967	3.901295	54	8017	3.904012	54	8067	3.906712	54
7968	3.901349	55	8018	3.904066	54	8068	3.906766	54
7969	3.901404	54	8019	3.904120	54	8069	3.906820	54
7970	3.901458	55	8020	3.904174	55	8070	3.906874	53
7971	3.901513	54	8021	3.904229	54	8071	3.906927	54
7972	3.901567	55	8022	3.904283	54	8072	3.906981	54
7973	3.901622	54	8023	3.904337	54	8073	3.907035	54
7974	3.901676	55	8024	3.904391	54	8074	3.907089	54
7975	3.901731	54	8025	3.904445	54	8075	3.907143	53
7976	3.901785	55	8026	3.904499	54	8076	3.907196	54
7977	3.901840	54	8027	3.904553	54	8077	3.907250	54
7978	3.901894	54	8028	3.904607	54	8078	3.907304	54
7979	3.901948	55	8029	3.904661	55	8079	3.907358	53
7980	3.902003	54	8030	3.904716	54	8080	3.907411	54
7981	3.902057	55	8031	3.904770	54	8081	3.907465	54
7982	3.902112	54	8032	3.904824	54	8082	3.907519	54
7983	3.902166	55	8033	3.904878	54	8083	3.907573	53
7984	3.902221	54	8034	3.904932	54	8084	3.907626	54
7985	3.902275	54	8035	3.904986	54	8085	3.907680	54
7986	3.902329	55	8036	3.905040	54	8086	3.907734	53
7987	3.902384	54	8037	3.905094	54	8087	3.907787	54
7988	3.902438	54	8038	3.905148	54	8088	3.907841	54
7989	3.902492	55	8039	3.905202	54	8089	3.907895	54
7990	3.902547	54	8040	3.905256	54	8090	3.907949	53
7991	3.902601	54	8041	3.905310	54	8091	3.908002	54
7992	3.902655	55	8042	3.905364	54	8092	3.908056	54
7993	3.902710	54	8043	3.905418	54	8093	2.908110	53
7994	3.902764	54	8044	3.905472	54	8094	3.908163	54
7995	3.902818	55	8045	3.905526	54	8095	3.908217	53
7996	3.902873	54	8046	3.905580	54	8096	3.908270	54
7997	3.902927	54	8047	3.905634	54	8097	3.908324	54
7998	3.902981	55	8048	3.905688	54	8098	3.908378	54
7999	3.903036	54	8049	3.905742	54	8099	3.908431	53
8000	3.903090	54	8050	3.905796	54	8100	3.908485	54

Nomb.	2. 15' 0"	Dif.	Nomb.	2. 15' 50"	Dif.	Nomb.	2. 16' 40"	Dif.
	Logarith.			Logarith.			Logarith.	
8100	3.908485	54	8150	3.911158	53	8200	3.913814	53
8101	3.908539	53	8151	3.911211	53	8201	3.913867	53
8102	3.908592	54	8152	3.911264	53	8202	3.913920	53
8103	3.908646	53	8153	3.911317	54	8203	3.913973	53
8104	3.908699	54	8154	3.911371	53	8204	3.914026	53
8105	3.908753	54	8155	3.911424	53	8205	3.914079	53
8106	3.908807	53	8156	3.911477	53	8206	3.914132	52
8107	3.908860	54	8157	3.911530	54	8207	3.914184	53
8108	3.908914	53	8158	3.911584	53	8208	3.914237	53
8109	3.908967	54	8159	3.911637	53	8209	3.914290	53
8110	3.909021	53	8160	3.911690	53	8210	3.914343	53
8111	3.909074	54	8161	3.911743	54	8211	3.914396	53
8112	3.909128	53	8162	3.911797	53	8212	3.914449	53
8113	3.909181	54	8163	3.911850	53	8213	3.914502	53
8114	3.909235	54	8164	3.911903	53	8214	3.914555	53
8115	3.909289	53	8165	3.911956	53	8215	3.914608	52
8116	3.909342	54	8166	3.912009	54	8216	3.914660	53
8117	3.909396	53	8167	3.912063	53	8217	3.914713	53
8118	3.909449	54	8168	3.912116	53	8218	3.914766	53
8119	3.909503	53	8169	3.912169	53	8219	3.914819	53
8120	3.909556	54	8170	3.912222	53	8220	3.914872	53
8121	3.909610	53	8171	3.912275	53	8221	3.914925	52
8122	3.909663	53	8172	3.912328	53	8222	3.914977	53
8123	3.909716	54	8173	3.912381	54	8223	3.915030	53
8124	3.909770	53	8174	3.912435	53	8224	3.915083	53
8125	3.909823	54	8175	3.912488	53	8225	3.915136	53
8126	3.909877	53	8176	3.912541	53	8226	3.915189	52
8127	3.909930	54	8177	3.912594	53	8227	3.915241	53
8128	3.909984	53	8178	3.912647	53	8228	3.915294	53
8129	3.910037	54	8179	3.912700	53	8229	3.915347	53
8130	3.910091	53	8180	3.912753	53	8230	3.915400	53
8131	3.910144	53	8181	3.912806	53	8231	3.915453	52
8132	3.910197	54	8182	3.912859	54	8232	3.915505	53
8133	3.910251	53	8183	3.912913	53	8233	3.915558	53
8134	3.910304	54	8184	3.912966	53	8234	3.915611	53
8135	3.910358	53	8185	3.913019	53	8235	3.915664	52
8136	3.910411	53	8186	3.913072	53	8236	3.915716	53
8137	3.910464	54	8187	3.913125	53	8237	3.915769	53
8138	3.910518	53	8188	3.913178	53	8238	3.915822	52
8139	3.910571	53	8189	3.913231	53	8239	3.915874	53
8140	3.910624	54	8190	3.913284	53	8240	3.915927	53
8141	3.910678	53	8191	3.913337	53	8241	3.915980	53
8142	3.910731	53	8192	3.913390	53	8242	3.916033	52
8143	3.910784	54	8193	3.913443	53	8243	3.916085	53
8144	3.910838	53	8194	3.913496	53	8244	3.916138	53
8145	3.910891	53	8195	3.913549	53	8245	3.916191	52
8146	3.910944	54	8196	3.913602	53	8246	3.916243	53
8147	3.910998	53	8197	3.913655	53	8247	3.916296	53
8148	3.911051	53	8198	3.913708	53	8248	3.916349	52
8149	3.911104	54	8199	3.913761	53	8249	3.916401	53
8150	3.911158		8200	3.913814		8250	3.916454	

Nomb.	2. 17' 30"	Dif.	Nomb.	2. 18' 20"	Dif.	Nomb.	2. 19' 10"	Dif.
	Logarith.			Logarith.			Logarith.	
8250	3.916454		8300	3.919078		8350	3.921686	
8251	3.916507	53	8301	3.919130	52	8351	3.921738	52
8252	3.916559	52	8302	3.919183	53	8352	3.921790	52
8253	3.916612	53	8303	3.919235	52	8353	3.921842	52
8254	3.916664	52	8304	3.919287	52	8354	3.921894	52
		53			53			52
8255	3.916717	53	8305	3.919340	52	8355	3.921946	52
8256	3.916770	52	8306	3.919392	52	8356	3.921998	52
8257	3.916822	52	8307	3.919444	52	8357	3.922050	52
8258	3.916875	53	8308	3.919496	52	8358	3.922102	52
8259	3.916927	52	8309	3.919549	53	8359	3.922154	52
		53			52			52
8260	3.916980	53	8310	3.919601	52	8360	3.922206	52
8261	3.917033	52	8311	3.919653	52	8361	3.922258	52
8262	3.917085	52	8312	3.919706	53	8362	3.922310	52
8263	3.917138	53	8313	3.919758	52	8363	3.922362	52
8264	3.917190	52	8314	3.919810	52	8364	3.922414	52
		53			52			52
8265	3.917243	52	8315	3.919862	52	8365	3.922466	52
8266	3.917295	52	8316	3.919914	52	8366	3.922518	52
8267	3.917348	53	8317	3.919967	53	8367	3.922570	52
8268	3.917400	52	8318	3.920019	52	8368	3.922622	52
8269	3.917453	53	8319	3.920071	52	8369	3.922674	51
		53			52			52
8270	3.917506	52	8320	3.920123	53	8370	3.922725	52
8271	3.917558	52	8321	3.920176	52	8371	3.922777	52
8272	3.917611	53	8322	3.920228	52	8372	3.922829	52
8273	3.917663	52	8323	3.920280	52	8373	3.922881	52
8274	3.917716	53	8324	3.920332	52	8374	3.922933	52
		52			53			52
8275	3.917768	52	8325	3.920384	52	8375	3.922985	52
8276	3.917820	52	8326	3.920436	52	8376	3.923037	52
8277	3.917873	53	8327	3.920489	53	8377	3.923089	52
8278	3.917925	52	8328	3.920541	52	8378	3.923140	51
8279	3.917978	53	8329	3.920593	52	8379	3.923192	52
		52			52			52
8280	3.918030	53	8330	3.920645	52	8380	3.923244	52
8281	3.918083	52	8331	3.920697	52	8381	3.923296	52
8282	3.918135	52	8332	3.920749	52	8382	3.923348	52
8283	3.918188	53	8333	3.920801	52	8383	3.923399	51
8284	3.918240	52	8334	3.920853	52	8384	3.923451	52
		53			53			52
8285	3.918293	52	8335	3.920906	52	8385	3.923503	52
8286	3.918345	52	8336	3.920958	52	8386	3.923555	52
8287	3.918397	52	8337	3.921010	52	8387	3.923607	52
8288	3.918450	53	8338	3.921062	52	8388	3.923658	51
8289	3.918502	52	8339	3.921114	52	8389	3.923710	52
		53			52			52
8290	3.918555	52	8340	3.921166	52	8390	3.923762	52
8291	3.918607	52	8341	3.921218	52	8391	3.923814	51
8292	3.918659	52	8342	3.921270	52	8392	3.923865	52
8293	3.918712	53	8343	3.921322	52	8393	3.923917	52
8294	3.918764	52	8344	3.921374	52	8394	3.923969	52
		52			52			52
8295	3.918816	53	8345	3.921426	52	8395	3.924021	51
8296	3.918869	52	8346	3.921478	52	8396	3.924072	52
8297	3.918921	52	8347	3.921530	52	8397	3.924124	52
8298	3.918973	52	8348	3.921582	52	8398	3.924176	52
8299	3.919026	53	8349	3.921634	52	8399	3.924228	52
8300	3.919078	52	8350	3.921686	52	8400	3.924279	51

Nomb.	2. 20' 0"	Dif.	Nomb.	2. 20' 50"	Dif.	Nomb.	2. 21' 40"	Dif.
Logarith.			Logarith.			Logarith.		
8400	3.924279	52	8450	3.926857	51	8500	3.929419	51
8401	3.924331	52	8451	3.926908	51	8501	3.929470	51
8402	3.924383	51	8452	3.926959	52	8502	3.929521	51
8403	3.924434	52	8453	3.927011	51	8503	3.929572	51
8404	3.924486	52	8454	3.927062	52	8504	3.929623	51
8405	3.924538	51	8455	3.927114	51	8505	3.929674	51
8406	3.924589	52	8456	3.927165	51	8506	3.929725	51
8407	3.924641	52	8457	3.927216	52	8507	3.929776	51
8408	3.924693	51	8458	3.927268	51	8508	3.929827	52
8409	3.924744	52	8459	3.927319	51	8509	3.929879	51
8410	3.924796	52	8460	3.927370	52	8510	3.929930	51
8411	3.924848	51	8461	3.927422	51	8511	3.929981	51
8412	3.924899	52	8462	3.927473	51	8512	3.930032	51
8413	3.924951	51	8463	3.927524	52	8513	3.930083	51
8414	3.925002	52	8464	3.927576	51	8514	3.930134	51
8415	3.925054	52	8465	3.927627	51	8515	3.930185	51
8416	3.925106	51	8466	3.927678	52	8516	3.930236	51
8417	3.925157	52	8467	3.927730	51	8517	3.930287	51
8418	3.925209	52	8468	3.927781	51	8518	3.930338	51
8419	3.925261	51	8469	3.927832	51	8519	3.930389	51
8420	3.925312	52	8470	3.927883	52	8520	3.930440	51
8421	3.925364	51	8471	3.927935	51	8521	3.930491	51
8422	3.925415	52	8472	3.927986	51	8522	3.930542	50
8423	3.925467	51	8473	3.928037	51	8523	3.930592	51
8424	3.925518	52	8474	3.928088	52	8524	3.930643	51
8425	3.925570	51	8475	3.928140	51	8525	3.930694	51
8426	3.925621	52	8476	3.928191	51	8526	3.930745	51
8427	3.925673	52	8477	3.928242	51	8527	3.930796	51
8428	3.925725	51	8478	3.928293	52	8528	3.930847	51
8429	3.925776	52	8479	3.928345	51	8529	3.930898	51
8430	3.925828	51	8480	3.928396	51	8530	3.930949	51
8431	3.925879	52	8481	3.928447	51	8531	3.931000	51
8432	3.925931	51	8482	3.928498	51	8532	3.931051	51
8433	3.925982	52	8483	3.928549	52	8533	3.931102	51
8434	3.926034	51	8484	3.928601	51	8534	3.931153	51
8435	3.926085	52	8485	3.928652	51	8535	3.931204	50
8436	3.926137	51	8486	3.928703	51	8536	3.931254	51
8437	3.926188	52	8487	3.928754	51	8537	3.931305	51
8438	3.926240	51	8488	3.928805	52	8538	3.931356	51
8439	3.926291	51	8489	3.928857	51	8539	3.931407	51
8440	3.926342	52	8490	3.928908	51	8540	3.931458	51
8441	3.926394	51	8491	3.928959	51	8541	3.931509	51
8442	3.926445	52	8492	3.929010	51	8542	3.931560	50
8443	3.926497	51	8493	3.929061	51	8543	3.931610	51
8444	3.926548	52	8494	3.929112	51	8544	3.931661	51
8445	3.926600	51	8495	3.929163	52	8545	3.931712	51
8446	3.926651	51	8496	3.929215	51	8546	3.931763	51
8447	3.926702	52	8497	3.929266	51	8547	3.931814	51
8448	3.926754	51	8498	3.929317	51	8548	3.931865	50
8449	3.926805	52	8499	3.929368	51	8549	3.931915	51
8450	3.926857		8500	3.929419		8550	3.931966	

Nomb.	2. 22' 30"	Dif.	Nomb.	2. 23' 20"	Dif.	Nomb.	2. 24' 10"	Dif.
	Logarith.			Logarith.			Logarith.	
8550	3.931966	51	8600	3.934498	51	8650	3.937016	50
8551	3.932017	51	8601	3.934549	50	8651	3.937066	51
8552	3.932068	50	8602	3.934599	51	8652	3.937117	50
8553	3.932118	51	8603	3.934650	50	8653	3.937167	50
8554	3.932169	51	8604	3.934700	51	8654	3.937217	50
8555	3.932220	51	8605	3.934751	50	8655	3.937267	50
8556	3.932271	51	8606	3.934801	51	8656	3.937317	50
8557	3.932322	50	8607	3.934852	50	8657	3.937367	51
8558	3.932372	51	8608	3.934902	51	8658	3.937418	50
8559	3.932423	51	8609	3.934953	50	8659	3.937468	50
8560	3.932474	50	8610	3.935003	51	8660	3.937518	50
8561	3.932524	51	8611	3.935054	50	8661	3.937568	50
8562	3.932575	51	8612	3.935104	50	8662	3.937618	50
8563	3.932626	51	8613	3.935154	51	8663	3.937668	50
8564	3.932677	50	8614	3.935205	50	8664	3.937718	51
8565	3.932727	51	8615	3.935255	51	8665	3.937769	50
8566	3.932778	51	8616	3.935306	50	8666	3.937819	50
8567	3.932829	50	8617	3.935356	50	8667	3.937869	50
8568	3.932879	51	8618	3.935406	51	8668	3.937919	50
8569	3.932930	51	8619	3.935457	50	8669	3.937969	50
8570	3.932981	50	8620	3.935507	51	8670	3.938019	50
8571	3.933031	51	8621	3.935558	50	8671	3.938069	50
8572	3.933082	51	8622	3.935608	50	8672	3.938119	50
8573	3.933133	50	8623	3.935658	51	8673	3.938169	50
8574	3.933183	51	8624	3.935709	50	8674	3.938219	50
8575	3.933234	51	8625	3.935759	50	8675	3.938269	51
8576	3.933285	50	8626	3.935809	51	8676	3.938320	50
8577	3.933335	51	8627	3.935860	50	8677	3.938370	50
8578	3.933386	51	8628	3.935910	50	8678	3.938420	50
8579	3.933437	50	8629	3.935960	51	8679	3.938470	50
8580	3.933487	51	8630	3.936011	50	8680	3.938520	50
8581	3.933538	51	8631	3.936061	50	8681	3.938570	50
8582	3.933589	50	8632	3.936111	51	8682	3.938620	50
8583	3.933639	51	8633	3.936162	50	8683	3.938670	50
8584	3.933690	50	8634	3.936212	50	8684	3.938720	50
8585	3.933740	51	8635	3.936262	51	8685	3.938770	50
8586	3.933791	50	8636	3.936313	50	8686	3.938820	50
8587	3.933841	51	8637	3.936363	50	8687	3.938870	50
8588	3.933892	51	8638	3.936413	50	8688	3.938920	50
8589	3.933943	50	8639	3.936463	51	8689	3.938970	50
8590	3.933993	51	8640	3.936514	50	8690	3.939020	50
8591	3.934044	50	8641	3.936564	50	8691	3.939070	50
8592	3.934094	51	8642	3.936614	51	8692	3.939120	50
8593	3.934145	50	8643	3.936665	50	8693	3.939170	50
8594	3.934195	51	8644	3.936715	50	8694	3.939220	50
8595	3.934246	50	8645	3.936765	50	8695	3.939270	50
8596	3.934296	51	8646	3.936815	50	8696	3.939320	49
8597	3.934347	50	8647	3.936865	51	8697	3.939369	50
8598	3.934397	51	8648	3.936916	50	8698	3.939419	50
8599	3.934448	50	8649	3.936966	50	8699	3.939469	50
8600	3.934498		8650	3.937016		8700	3.939519	

Nomb.	2. 25' 0"	Dif.	Nomb.	2. 25' 50"	Dif.	Nomb.	2. 26' 40"	Dif.
	Logarith.			Logarith.			Logarith.	
8700	3.939519	50	8750	3.942008	50	8800	3.944483	49
8701	3.939569	50	8751	3.942058	49	8801	3.944532	49
8702	3.939619	50	8752	3.942107	50	8802	3.944581	50
8703	3.939669	50	8753	3.942157	50	8803	3.944631	49
8704	3.939719	50	8754	3.942207	49	8804	3.944680	49
8705	3.939769	50	8755	3.942256	50	8805	3.944729	50
8706	3.939819	50	8756	3.942306	49	8806	3.944779	49
8707	3.939869	49	8757	3.942355	50	8807	3.944828	49
8708	3.939918	50	8758	3.942405	50	8808	3.944877	50
8709	3.939968	50	8759	3.942455	49	8809	3.944927	49
8710	3.940018	50	8760	3.942504	50	8810	3.944976	49
8711	3.940068	50	8761	3.942554	49	8811	3.945025	49
8712	3.940118	50	8762	3.942603	50	8812	3.945074	50
8713	3.940168	50	8763	3.942653	49	8813	3.945124	49
8714	3.940218	49	8764	3.942702	50	8814	3.945173	49
8715	3.940267	50	8765	3.942752	49	8815	3.945222	50
8716	3.940317	50	8766	3.942801	50	8816	3.945272	49
8717	3.940367	50	8767	3.942851	50	8817	3.945321	49
8718	3.940417	50	8768	3.942901	49	8818	3.945370	49
8719	3.940467	49	8769	3.942950	50	8819	3.945419	50
8720	3.940516	50	8770	3.943000	49	8820	3.945469	49
8721	3.940566	50	8771	3.943049	50	8821	3.945518	49
8722	3.940616	50	8772	3.943099	49	8822	3.945567	49
8723	3.940666	50	8773	3.943148	50	8823	3.945616	49
8724	3.940716	49	8774	3.943198	49	8824	3.945665	50
8725	3.940765	50	8775	3.943247	50	8825	3.945715	49
8726	3.940815	50	8776	3.943297	49	8826	3.945764	49
8727	3.940865	50	8777	3.943346	50	8827	3.945813	49
8728	3.940915	49	8778	3.943396	49	8828	3.945862	50
8729	3.940964	50	8779	3.943445	50	8829	3.945912	49
8730	3.941014	50	8780	3.943495	49	8830	3.945961	49
8731	3.941064	50	8781	3.943544	49	8831	3.946010	49
8732	3.941114	49	8782	3.943593	50	8832	3.946059	49
8733	3.941163	50	8783	3.943643	49	8833	3.946108	49
8734	3.941213	50	8784	3.943692	50	8834	3.946157	50
8735	3.941263	50	8785	3.943742	49	8835	3.946207	49
8736	3.941313	49	8786	3.943791	50	8836	3.946256	49
8737	3.941362	50	8787	3.943841	49	8837	3.946305	49
8738	3.941412	50	8788	3.943890	49	8838	3.946354	49
8739	3.941462	49	8789	3.943939	50	8839	3.946403	49
8740	3.941511	50	8790	3.943989	49	8840	3.946452	49
8741	3.941561	50	8791	3.944038	50	8841	3.946501	49
8742	3.941611	49	8792	3.944088	49	8842	3.946550	50
8743	3.941660	50	8793	3.944137	49	8843	3.946600	49
8744	3.941710	50	8794	3.944186	50	8844	3.946649	49
8745	3.941760	49	8795	3.944236	49	8845	3.946698	49
8746	3.941809	50	8796	3.944285	50	8846	3.946747	49
8747	3.941859	50	8797	3.944335	49	8847	3.946796	49
8748	3.941909	49	8798	3.944384	49	8848	3.946845	49
8749	3.941958	50	8799	3.944433	50	8849	3.946894	49
8750	3.942008		8800	3.944483		8850	3.946943	

Nomb.	2. 27' 30"	Dif.	Nomb.	2. 28' 20"	Dif.	Nomb.	2. 29' 10"	Dif.
	Logarith.			Logarith.			Logarith.	
8850	3.946943	49	8900	3.949390	49	8950	3.951823	49
8851	3.946992	49	8901	3.949439	49	8951	3.951872	49
8852	3.947041	49	8902	3.949488	49	8952	3.951920	48
8853	3.947090	49	8903	3.949536	48	8953	3.951969	49
8854	3.947140	50	8904	3.949585	49	8954	3.952017	48
		49			49			49
8855	3.947189	49	8905	3.949634	49	8955	3.952066	48
8856	3.947238	49	8906	3.949683	48	8956	3.952114	49
8857	3.947287	49	8907	3.949731	48	8957	3.952163	49
8858	3.947336	49	8908	3.949780	49	8958	3.952211	48
8859	3.947385	49	8909	3.949829	49	8959	3.952260	49
		49			49			48
8860	3.947434	49	8910	3.949878	48	8960	3.952308	48
8861	3.947483	49	8911	3.949926	49	8961	3.952356	49
8862	3.947532	49	8912	3.949975	49	8962	3.952405	49
8863	3.947581	49	8913	3.950024	49	8963	3.952453	48
8864	3.947630	49	8914	3.950073	49	8964	3.952502	49
		49			48			48
8865	3.947679	49	8915	3.950121	49	8965	3.952550	49
8866	3.947728	49	8916	3.950170	49	8966	3.952599	49
8867	3.947777	49	8917	3.950219	49	8967	3.952647	48
8868	3.947826	49	8918	3.950267	48	8968	3.952696	49
8869	3.947875	49	8919	3.950316	49	8969	3.952744	48
		49			49			48
8870	3.947924	49	8920	3.950365	49	8970	3.952792	49
8871	3.947973	49	8921	3.950414	49	8971	3.952841	49
8872	3.948022	49	8922	3.950462	48	8972	3.952889	48
8873	3.948070	48	8923	3.950511	49	8973	3.952938	49
8874	3.948119	49	8924	3.950560	49	8974	3.952986	48
		49			48			48
8875	3.948168	49	8925	3.950608	49	8975	3.953034	49
8876	3.948217	49	8926	3.950657	49	8976	3.953083	49
8877	3.948266	49	8927	3.950706	49	8977	3.953131	48
8878	3.948315	49	8928	3.950754	48	8978	3.953180	49
8879	3.948364	49	8929	3.950803	49	8979	3.953228	48
		49			48			48
8880	3.948413	49	8930	3.950851	49	8980	3.953276	49
8881	3.948462	49	8931	3.950900	49	8981	3.953325	49
8882	3.948511	49	8932	3.950949	49	8982	3.953373	48
8883	3.948560	49	8933	3.950997	48	8983	3.953421	49
8884	3.948609	49	8934	3.951046	49	8984	3.953470	49
		48			49			48
8885	3.948657	49	8935	3.951095	48	8985	3.953518	48
8886	3.948706	49	8936	3.951143	49	8986	3.953566	48
8887	3.948755	49	8937	3.951192	49	8987	3.953615	49
8888	3.948804	49	8938	3.951240	48	8988	3.953663	48
8889	3.948853	49	8939	3.951289	49	8989	3.953711	48
		49			49			49
8890	3.948902	49	8940	3.951338	48	8990	3.953760	48
8891	3.948951	49	8941	3.951386	48	8991	3.953808	48
8892	3.948999	48	8942	3.951435	49	8992	3.953856	48
8893	3.949048	49	8943	3.951483	48	8993	3.953905	49
8894	3.949097	49	8944	3.951532	49	8994	3.953953	48
		49			48			48
8895	3.949146	49	8945	3.951580	49	8995	3.954001	48
8896	3.949195	49	8946	3.951629	49	8996	3.954049	48
8897	3.949244	49	8947	3.951677	48	8997	3.954098	49
8898	3.949292	48	8948	3.951726	49	8998	3.954146	48
8899	3.949341	49	8949	3.951774	48	8999	3.954194	48
8900	3.949390	49	8950	3.951823	49	9000	3.954243	49

Nomb.	2. 30' 0"	Dif.	Nomb.	2. 30' 50"	Dif.	Nomb.	2. 31' 40"	Dif.
9000	3.954243	48	9050	3.956649	48	9100	3.959041	48
9001	3.954291	48	9051	3.956697	48	9101	3.959089	48
9002	3.954339	48	9052	3.956745	48	9102	3.959137	48
9003	3.954387	48	9053	3.956793	48	9103	3.959185	48
9004	3.954435	48	9054	3.956840	47	9104	3.959232	47
9005	3.954484	49	9055	3.956888	48	9105	3.959280	48
9006	3.954532	48	9056	3.956936	48	9106	3.959328	48
9007	3.954580	48	9057	3.956984	48	9107	3.959375	47
9008	3.954628	48	9058	3.957032	48	9108	3.959423	48
9009	3.954677	49	9059	3.957080	48	9109	3.959471	48
9010	3.954725	48	9060	3.957128	48	9110	3.959518	47
9011	3.954773	48	9061	3.957176	48	9111	3.959566	48
9012	3.954821	48	9062	3.957224	48	9112	3.959614	48
9013	3.954869	48	9063	3.957272	48	9113	3.959661	47
9014	3.954918	49	9064	3.957320	48	9114	3.959709	48
9015	3.954966	48	9065	3.957368	48	9115	3.959757	48
9016	3.955014	48	9066	3.957416	48	9116	3.959804	47
9017	3.955062	48	9067	3.957464	48	9117	3.959852	48
9018	3.955110	48	9068	3.957512	48	9118	3.959900	48
9019	3.955158	48	9069	3.957559	47	9119	3.959947	47
9020	3.955207	49	9070	3.957607	48	9120	3.959995	48
9021	3.955255	48	9071	3.957655	48	9121	3.960042	47
9022	3.955303	48	9072	3.957703	48	9122	3.960090	48
9023	3.955351	48	9073	3.957751	48	9123	3.960138	48
9024	3.955399	48	9074	3.957799	48	9124	3.960185	47
9025	3.955447	48	9075	3.957847	48	9125	3.960233	48
9026	3.955495	48	9076	3.957894	47	9126	3.960280	47
9027	3.955543	48	9077	3.957942	48	9127	3.960328	48
9028	3.955591	49	9078	3.957990	48	9128	3.960376	48
9029	3.955640	48	9079	3.958038	48	9129	3.960423	47
9030	3.955688	48	9080	3.958086	48	9130	3.960471	48
9031	3.955736	48	9081	3.958134	48	9131	3.960518	47
9032	3.955784	48	9082	3.958181	47	9132	3.960566	48
9033	3.955832	48	9083	3.958229	48	9133	3.960613	47
9034	3.955880	48	9084	3.958277	48	9134	3.960661	48
9035	3.955928	48	9085	3.958325	48	9135	3.960709	47
9036	3.955976	48	9086	3.958373	48	9136	3.960756	48
9037	3.956024	48	9087	3.958421	47	9137	3.960804	47
9038	3.956072	48	9088	3.958468	48	9138	3.960851	48
9039	3.956120	48	9089	3.958516	48	9139	3.960899	47
9040	3.956168	48	9090	3.958564	48	9140	3.960946	48
9041	3.956216	48	9091	3.958612	47	9141	3.960994	47
9042	3.956265	49	9092	3.958659	48	9142	3.961041	48
9043	3.956313	48	9093	3.958707	48	9143	3.961089	47
9044	3.956361	48	9094	3.958755	48	9144	3.961136	48
9045	3.956409	48	9095	3.958803	47	9145	3.961184	47
9046	3.956457	48	9096	3.958850	48	9146	3.961231	48
9047	3.956505	48	9097	3.958898	48	9147	3.961279	47
9048	3.956553	48	9098	3.958946	48	9148	3.961326	48
9049	3.956601	48	9099	3.958994	47	9149	3.961374	47
9050	3.956649	48	9100	3.959041	47	9150	3.961421	47

Nomb.	2. 32' 30"	Dif.	Nomb.	2. 33' 20"	Dif.	Nomb.	2. 34' 10"	Dif.
	Logarith.			Logarith.			Logarith.	
9150	3.961421	48	9200	3.963788	47	9250	3.966142	47
9151	3.961469	47	9201	3.963835	47	9251	3.966189	47
9152	3.961516	47	9202	3.963882	47	9252	3.966236	47
9153	3.961563	47	9203	3.963929	47	9253	3.966283	47
9154	3.961611	48	9204	3.963977	48	9254	3.966329	46
9155	3.961658	47	9205	3.964024	47	9255	3.966376	47
9156	3.961706	48	9206	3.964071	47	9256	3.966423	47
9157	3.961753	47	9207	3.964118	47	9257	3.966470	47
9158	3.961801	48	9208	3.964165	47	9258	3.966517	47
9159	3.961848	47	9209	3.964212	47	9259	3.966564	47
9160	3.961895	47	9210	3.964260	48	9260	3.966611	47
9161	3.961943	48	9211	3.964307	47	9261	3.966658	47
9162	3.961990	47	9212	3.964354	47	9262	3.966705	47
9163	3.962038	48	9213	3.964401	47	9263	3.966752	47
9164	3.962085	47	9214	3.964448	47	9264	3.966799	47
9165	3.962132	47	9215	3.964495	46	9265	3.966845	46
9166	3.962180	48	9216	3.964542	47	9266	3.966892	47
9167	3.962227	47	9217	3.964590	48	9267	3.966939	47
9168	3.962275	48	9218	3.964637	47	9268	3.966986	47
9169	3.962322	47	9219	3.964684	47	9269	3.967033	47
9170	3.962369	47	9220	3.964731	47	9270	3.967080	47
9171	3.962417	48	9221	3.964778	47	9271	3.967127	47
9172	3.962464	47	9222	3.964825	47	9272	3.967173	46
9173	3.962511	47	9223	3.964872	47	9273	3.967220	47
9174	3.962559	48	9224	3.964919	47	9274	3.967267	47
9175	3.962606	47	9225	3.964966	47	9275	3.967314	47
9176	3.962653	47	9226	3.965013	47	9276	3.967361	47
9177	3.962701	48	9227	3.965061	48	9277	3.967408	47
9178	3.962748	47	9228	3.965108	47	9278	3.967454	46
9179	3.962795	47	9229	3.965155	47	9279	3.967501	47
9180	3.962843	48	9230	3.965202	47	9280	3.967548	47
9181	3.962890	47	9231	3.965249	47	9281	3.967595	47
9182	3.962937	47	9232	3.965296	47	9282	3.967642	47
9183	3.962985	48	9233	3.965343	47	9283	3.967688	46
9184	3.963032	47	9234	3.965390	47	9284	3.967735	47
9185	3.963079	47	9235	3.965437	47	9285	3.967782	47
9186	3.963126	47	9236	3.965484	47	9286	3.967829	47
9187	3.963174	48	9237	3.965531	47	9287	3.967875	46
9188	3.963221	47	9238	3.965578	47	9288	3.967922	47
9189	3.963268	47	9239	3.965625	47	9289	3.967969	47
9190	3.963316	48	9240	3.965672	47	9290	3.968016	47
9191	3.963363	47	9241	3.965719	47	9291	3.968062	46
9192	3.963410	47	9242	3.965766	47	9292	3.968109	47
9193	3.963457	47	9243	3.965813	47	9293	3.968156	47
9194	3.963504	47	9244	3.965860	47	9294	3.968203	47
9195	3.963552	48	9245	3.965907	47	9295	3.968249	46
9196	3.963599	47	9246	3.965954	47	9296	3.968296	47
9197	3.963646	47	9247	3.966001	47	9297	3.968343	47
9198	3.963693	47	9248	3.966048	47	9298	3.968390	47
9199	3.963741	48	9249	3.966095	47	9299	3.968436	46
9200	3.963788	47	9250	3.966142	47	9300	3.968483	47

Nomb.	2. 35' 0"	Dif.	Nomb.	2. 35' 50"	Dif.	Nomb.	2. 36. 40"	Dif.
	Logarith.			Logarith.			Logarith.	
9300	3.968483	47	9350	3.970812	46	9400	3.973128	46
9301	3.968530	46	9351	3.970858	46	9401	3.973174	46
9302	3.968576	47	9352	3.970904	46	9402	3.973220	46
9303	3.968623	47	9353	3.970951	46	9403	3.973266	46
9304	3.968670	46	9354	3.970997	47	9404	3.973313	46
9305	3.968716	47	9355	3.971044	46	9405	3.973359	46
9306	3.968763	47	9356	3.971090	47	9406	3.973405	46
9307	3.968810	46	9357	3.971137	46	9407	3.973451	46
9308	3.968856	47	9358	3.971183	46	9408	3.973497	46
9309	3.968903	47	9359	3.971229	47	9409	3.973543	47
9310	3.968950	46	9360	3.971276	46	9410	3.973590	46
9311	3.968996	47	9361	3.971322	47	9411	3.973636	46
9312	3.969043	47	9362	3.971369	46	9412	3.973682	46
9313	3.969090	46	9363	3.971415	46	9413	3.973728	46
9314	3.969136	47	9364	3.971461	47	9414	3.973774	46
9315	3.969183	46	9365	3.971508	46	9415	3.973820	46
9316	3.969229	47	9366	3.971554	47	9416	3.973866	47
9317	3.969276	47	9367	3.971601	46	9417	3.973913	46
9318	3.969323	46	9368	3.971647	46	9418	3.973959	46
9319	3.969369	47	9369	3.971693	47	9419	3.974005	46
9320	3.969416	47	9370	3.971740	46	9420	3.974051	46
9321	3.969463	46	9371	3.971786	46	9421	3.974097	46
9322	3.969509	47	9372	3.971832	47	9422	3.974143	46
9323	3.969556	46	9373	3.971879	46	9423	3.974189	46
9324	3.969602	47	9374	3.971925	46	9424	3.974235	46
9325	3.969649	46	9375	3.971971	47	9425	3.974281	46
9326	3.969695	47	9376	3.972018	46	9426	3.974327	47
9327	3.969742	47	9377	3.972064	46	9427	3.974374	46
9328	3.969789	46	9378	3.972110	47	9428	3.974420	46
9329	3.969835	47	9379	3.972157	46	9429	3.974466	46
9330	3.969882	46	9380	3.972203	46	9430	3.974512	46
9331	3.969928	47	9381	3.972249	46	9431	3.974558	46
9332	3.969975	46	9382	3.972295	47	9432	3.974604	46
9333	3.970021	47	9383	3.972342	46	9433	3.974650	46
9334	3.970068	46	9384	3.972388	46	9434	3.974696	46
9335	3.970114	47	9385	3.972434	47	9435	3.974742	46
9336	3.970161	46	9386	3.972481	46	9436	3.974788	46
9337	3.970207	47	9387	3.972527	46	9437	3.974834	46
9338	3.970254	46	9388	3.972573	46	9438	3.974880	46
9339	3.970300	47	9389	3.972619	47	9439	3.974926	46
9340	3.970347	46	9390	3.972666	46	9440	3.974972	46
9341	3.970393	47	9391	3.972712	46	9441	3.975018	46
9342	3.970440	46	9392	3.972758	46	9442	3.975064	46
9343	3.970486	47	9393	3.972804	47	9443	3.975110	46
9344	3.970533	46	9394	3.972851	46	9444	3.975156	46
9345	3.970579	47	9395	3.972897	46	9445	3.975202	46
9346	3.970626	46	9396	3.972943	46	9446	3.975248	46
9347	3.970672	47	9397	3.972989	46	9447	3.975294	46
9348	3.970719	46	9398	3.973035	47	9448	3.975340	46
9349	3.970765	47	9399	3.973082	46	9449	3.975386	46
9350	3.970812	47	9400	3.973128	46	9450	3.975432	46

Nomb.	2. 37' 30"	Dif.	Nomb.	2. 38' 20"	Dif.	Nomb.	2. 39' 10"	Dif.
9450	3.975432	46	9500	3.977724	45	9550	3.980003	46
9451	3.975478	46	9501	3.977769	46	9551	3.980049	45
9452	3.975524	46	9502	3.977815	46	9552	3.980094	46
9453	3.975570	46	9503	3.977861	45	9553	3.980140	45
9454	3.975616	46	9504	3.977906	46	9554	3.980185	46
9455	3.975662	45	9505	3.977952	46	9555	3.980231	45
9456	3.975707	46	9506	3.977998	45	9556	3.980276	46
9457	3.975753	46	9507	3.978043	46	9557	3.980322	45
9458	3.975799	46	9508	3.978089	46	9558	3.980367	45
9459	3.975845	46	9509	3.978135	46	9559	3.980412	46
9460	3.975891	46	9510	3.978181	45	9560	3.980458	45
9461	3.975937	46	9511	3.978226	46	9561	3.980503	46
9462	3.975983	46	9512	3.978272	45	9562	3.980549	45
9463	3.976029	46	9513	3.978317	46	9563	3.980594	46
9464	3.976075	46	9514	3.978363	46	9564	3.980640	45
9465	3.976121	45	9515	3.978409	45	9565	3.980685	45
9466	3.976166	46	9516	3.978454	46	9566	3.980730	46
9467	3.976212	46	9517	3.978500	46	9567	3.980776	45
9468	3.976258	46	9518	3.978546	45	9568	3.980821	46
9469	3.976304	46	9519	3.978591	46	9569	3.980867	45
9470	3.976350	46	9520	3.978637	46	9570	3.980912	45
9471	3.976396	46	9521	3.978683	45	9571	3.980957	46
9472	3.976442	46	9522	3.978728	46	9572	3.981003	45
9473	3.976488	45	9523	3.978774	45	9573	3.981048	45
9474	3.976533	46	9524	3.978819	46	9574	3.981093	46
9475	3.976579	46	9525	3.978865	46	9575	3.981139	45
9476	3.976625	46	9526	3.978911	45	9576	3.981184	45
9477	3.976671	46	9527	3.978956	46	9577	3.981229	46
9478	3.976717	46	9528	3.979002	45	9578	3.981275	45
9479	3.976763	45	9529	3.979047	46	9579	3.981320	46
9480	3.976808	46	9530	3.979093	45	9580	3.981366	45
9481	3.976854	46	9531	3.979138	46	9581	3.981411	45
9482	3.976900	46	9532	3.979184	46	9582	3.981456	45
9483	3.976946	46	9533	3.979230	45	9583	3.981501	46
9484	3.976992	45	9534	3.979275	46	9584	3.981547	45
9485	3.977037	46	9535	3.979321	45	9585	3.981592	45
9486	3.977083	46	9536	3.979366	46	9586	3.981637	46
9487	3.977129	46	9537	3.979412	45	9587	3.981683	45
9488	3.977175	45	9538	3.979457	46	9588	3.981728	45
9489	3.977220	46	9539	3.979503	45	9589	3.981773	46
9490	3.977266	46	9540	3.979548	46	9590	3.981819	45
9491	3.977312	46	9541	3.979594	45	9591	3.981864	45
9492	3.977358	45	9542	3.979639	46	9592	3.981909	45
9493	3.977403	46	9543	3.979685	45	9593	3.981954	46
9494	3.977449	46	9544	3.979730	46	9594	3.982000	45
9495	3.977495	45	9545	3.979776	45	9595	3.982045	45
9496	3.977541	46	9546	3.979821	46	9596	3.982090	45
9497	3.977586	46	9547	3.979867	45	9597	3.982135	46
9498	3.977632	46	9548	3.979912	46	9598	3.982181	45
9499	3.977678	46	9549	3.979958	45	9599	3.982226	45
9500	3.977724	46	9550	3.980003	45	9600	3.982271	45

Nomb.	2. 40' 0"	Dif.	Nomb.	2. 40' 50"	Dif.	Nomb.	2. 41' 40"	Dif.
9600	3.982271	45	9650	3.984527	45	9700	3.986772	44
9601	3.982316	46	9651	3.984572	45	9701	3.986816	45
9602	3.982362	45	9652	3.984617	45	9702	3.986861	45
9603	3.982407	45	9653	3.984662	45	9703	3.986906	45
9604	3.982452	45	9654	3.984707	45	9704	3.986951	45
9605	3.982497	46	9655	3.984752	45	9705	3.986996	44
9606	3.982543	45	9656	3.984797	45	9706	3.987040	45
9607	3.982588	45	9657	3.984842	45	9707	3.987085	45
9608	3.982633	45	9658	3.984887	45	9708	3.987130	45
9609	3.982678	45	9659	3.984932	45	9709	3.987175	44
9610	3.982723	46	9660	3.984977	45	9710	3.987219	45
9611	3.982769	45	9661	3.985022	45	9711	3.987264	45
9612	3.982814	45	9662	3.985067	45	9712	3.987309	44
9613	3.982859	45	9663	3.985112	45	9713	3.987353	45
9614	3.982904	45	9664	3.985157	45	9714	3.987398	45
9615	3.982949	45	9665	3.985202	45	9715	3.987443	45
9616	3.982994	46	9666	3.985247	45	9716	3.987488	44
9617	3.983040	45	9667	3.985292	45	9717	3.987532	45
9618	3.983085	45	9668	3.985337	45	9718	3.987577	45
9619	3.983130	45	9669	3.985382	44	9719	3.987622	44
9620	3.983175	45	9670	3.985426	45	9720	3.987666	45
9621	3.983220	45	9671	3.985471	45	9721	3.987711	45
9622	3.983265	45	9672	3.985516	45	9722	3.987756	44
9623	3.983310	46	9673	3.985561	45	9723	3.987800	45
9624	3.983356	45	9674	3.985606	45	9724	3.987845	45
9625	3.983401	45	9675	3.985651	45	9725	3.987890	44
9626	3.983446	45	9676	3.985696	45	9726	3.987934	45
9627	3.983491	45	9677	3.985741	45	9727	3.987979	45
9628	3.983536	45	9678	3.985786	44	9728	3.988024	44
9629	3.983581	45	9679	3.985830	45	9729	3.988068	45
9630	3.983626	45	9680	3.985875	45	9730	3.988113	44
9631	3.983671	45	9681	3.985920	45	9731	3.988157	45
9632	3.983716	46	9682	3.985965	45	9732	3.988202	45
9633	3.983762	45	9683	3.986010	45	9733	3.988247	44
9634	3.983807	45	9684	3.986055	45	9734	3.988291	45
9635	3.983852	45	9685	3.986100	44	9735	3.988336	45
9636	3.983897	45	9686	3.986144	45	9736	3.988381	44
9637	3.983942	45	9687	3.986189	45	9737	3.988425	45
9638	3.983987	45	9688	3.986234	45	9738	3.988470	44
9639	3.984032	45	9689	3.986279	45	9739	3.988514	45
9640	3.984077	45	9690	3.986324	45	9740	3.988559	45
9641	3.984122	45	9691	3.986369	44	9741	3.988604	44
9642	3.984167	45	9692	3.986413	45	9742	3.988648	45
9643	3.984212	45	9693	3.986458	45	9743	3.988693	44
9644	3.984257	45	9694	3.986503	45	9744	3.988737	45
9645	3.984302	45	9695	3.986548	45	9745	3.988782	44
9646	3.984347	45	9696	3.986593	44	9746	3.988826	45
9647	3.984392	45	9697	3.986637	45	9747	3.988871	45
9648	3.984437	45	9698	3.986682	45	9748	3.988916	44
9649	3.984482	45	9699	3.986727	45	9749	3.988960	45
9650	3.984527	45	9700	3.986772	45	9750	3.989005	45

Nomb.	2. 42' 30"	Dif.	Nomb.	2. 43' 20"	Dif.	Nomb.	2. 44' 10"	Dif.
Logarith.			Logarith.			Logarith.		
9750	3.989005	44	9800	3.991226	44	9850	3.993436	44
9751	3.989049	45	9801	3.991270	45	9851	3.993480	44
9752	3.989094	44	9802	3.991315	45	9852	3.993524	44
9753	3.989138	45	9803	3.991359	44	9853	3.993568	45
9754	3.989183	44	9804	3.991403	45	9854	3.993613	44
9755	3.989227	45	9805	3.991448	44	9855	3.993657	44
9756	3.989272	44	9806	3.991492	44	9856	3.993701	44
9757	3.989316	45	9807	3.991536	44	9857	3.993745	44
9758	3.989361	44	9808	3.991580	45	9858	3.993789	44
9759	3.989405	45	9809	3.991625	44	9859	3.993833	44
9760	3.989450	44	9810	3.991669	44	9860	3.993877	44
9761	3.989494	45	9811	3.991713	45	9861	3.993921	44
9762	3.989539	44	9812	3.991758	44	9862	3.993965	44
9763	3.989583	45	9813	3.991802	44	9863	3.994009	44
9764	3.989628	44	9814	3.991846	45	9864	3.994053	44
9765	3.989672	45	9815	3.991890	44	9865	3.994097	44
9766	3.989717	44	9816	3.991935	45	9866	3.994141	44
9767	3.989761	45	9817	3.991979	44	9867	3.994185	44
9768	3.989806	44	9818	3.992023	44	9868	3.994229	44
9769	3.989850	45	9819	3.992067	44	9869	3.994273	44
9770	3.989895	44	9820	3.992111	45	9870	3.994317	44
9771	3.989939	45	9821	3.992156	44	9871	3.994361	44
9772	3.989983	44	9822	3.992200	44	9872	3.994405	44
9773	3.990028	45	9823	3.992244	44	9873	3.994449	44
9774	3.990072	44	9824	3.992288	45	9874	3.994493	44
9775	3.990117	45	9825	3.992333	44	9875	3.994537	44
9776	3.990161	44	9826	3.992377	44	9876	3.994581	44
9777	3.990205	45	9827	3.992421	44	9877	3.994625	44
9778	3.990250	44	9828	3.992465	44	9878	3.994669	44
9779	3.990294	45	9829	3.992509	44	9879	3.994713	44
9780	3.990339	44	9830	3.992554	45	9880	3.994757	44
9781	3.990383	45	9831	3.992598	44	9881	3.994801	44
9782	3.990428	44	9832	3.992642	44	9882	3.994845	44
9783	3.990472	45	9833	3.992686	44	9883	3.994889	44
9784	3.990516	44	9834	3.992730	45	9884	3.994933	44
9785	3.990561	45	9835	3.992774	44	9885	3.994977	44
9786	3.990605	44	9836	3.992819	45	9886	3.995021	44
9787	3.990650	45	9837	3.992863	44	9887	3.995065	43
9788	3.990694	44	9838	3.992907	44	9888	3.995108	44
9789	3.990738	45	9839	3.992951	44	9889	3.995152	44
9790	3.990783	44	9840	3.992995	44	9890	3.995196	44
9791	3.990827	45	9841	3.993039	44	9891	3.995240	44
9792	3.990871	44	9842	3.993083	44	9892	3.995284	44
9793	3.990916	45	9843	3.993127	45	9893	3.995328	44
9794	3.990960	44	9844	3.993172	44	9894	3.995372	44
9795	3.991004	45	9845	3.993216	44	9895	3.995416	44
9796	3.991049	44	9846	3.993260	44	9896	3.995460	44
9797	3.991093	45	9847	3.993304	44	9897	3.995504	43
9798	3.991137	44	9848	3.993348	44	9898	3.995547	44
9799	3.991182	45	9849	3.993392	44	9899	3.995591	44
9800	3.991226	44	9850	3.993436	44	9900	3.995635	44

Nomb.	2. 45° 0'	Dif.	Nomb.	2. 45° 50'	Dif.	Nomb.	2. 46° 40'	D.
	Logarith.			Logarith.			Logarith.	
9900	3.995635	44	9950	3.997823	44	10000	4.000000	43
9901	3.995679	44	9951	3.997867	43	10001	4.000043	44
9902	3.995723	44	9952	3.997910	44	10002	4.000087	43
9903	3.995767	44	9953	3.997954	44	10003	4.000130	44
9904	3.995811	44	9954	3.997998	43	10004	4.000174	43
9905	3.995854	44	9955	3.998041	44	10005	4.000217	43
9906	3.995898	44	9956	3.998085	44	10006	4.000260	44
9907	3.995942	44	9957	3.998129	43	10007	4.000304	43
9908	3.995986	44	9958	3.998172	44	10008	4.000347	44
9909	3.996030	44	9959	3.998216	43	10009	4.000391	43
9910	3.996074	43	9960	3.998259	44	10010	4.000434	43
9911	3.996117	44	9961	3.998303	44	10011	4.000477	44
9912	3.996161	44	9962	3.998347	43	10012	4.000521	43
9913	3.996205	44	9963	3.998390	44	10013	4.000564	44
9914	3.996249	44	9964	3.998434	43	10014	4.000608	43
9915	3.996293	44	9965	3.998477	44	10015	4.000651	43
9916	3.996337	43	9966	3.998521	43	10016	4.000694	44
9917	3.996380	44	9967	3.998564	44	10017	4.000738	43
9918	3.996424	44	9968	3.998608	44	10018	4.000781	43
9919	3.996468	44	9969	3.998652	43	10019	4.000824	44
9920	3.996512	43	9970	3.998695	44	10020	4.000868	43
9921	3.996555	44	9971	3.998739	43	10021	4.000911	44
9922	3.996599	44	9972	3.998782	44	10022	4.000954	43
9923	3.996643	44	9973	3.998826	43	10023	4.000998	43
9924	3.996687	44	9974	3.998869	44	10024	4.001041	43
9925	3.996731	43	9975	3.998913	43	10025	4.001084	44
9926	3.996774	44	9976	3.998956	44	10026	4.001128	43
9927	3.996818	44	9977	3.999000	43	10027	4.001171	43
9928	3.996862	44	9978	3.999043	44	10028	4.001214	44
9929	3.996906	43	9979	3.999087	44	10029	4.001258	43
9930	3.996949	44	9980	3.999131	43	10030	4.001301	43
9931	3.996993	44	9981	3.999174	44	10031	4.001344	44
9932	3.997037	43	9982	3.999218	43	10032	4.001388	43
9933	3.997080	44	9983	3.999261	44	10033	4.001431	43
9934	3.997124	44	9984	3.999305	43	10034	4.001474	43
9935	3.997168	44	9985	3.999348	44	10035	4.001517	44
9936	3.997212	43	9986	3.999392	43	10036	4.001561	43
9937	3.997255	44	9987	3.999435	44	10037	4.001604	43
9938	3.997299	44	9988	3.999479	43	10038	4.001647	43
9939	3.997343	43	9989	3.999522	43	10039	4.001690	44
9940	3.997386	44	9990	3.999565	44	10040	4.001734	43
9941	3.997430	44	9991	3.999609	43	10041	4.001777	43
9942	3.997474	43	9992	3.999652	44	10042	4.001820	43
9943	3.997517	44	9993	3.999696	43	10043	4.001863	44
9944	3.997561	44	9994	3.999739	44	10044	4.001907	43
9945	3.997605	43	9995	3.999783	43	10045	4.001950	43
9946	3.997648	44	9996	3.999826	44	10046	4.001993	43
9947	3.997692	44	9997	3.999870	43	10047	4.002036	44
9948	3.997736	43	9998	3.999913	44	10048	4.002080	43
9949	3.997779	44	9999	3.999957	43	10049	4.002123	43
9950	3.997823	44	10000	4.000000		10050	4.002166	43

Nomb.	2. 47' 30"	D.	Nomb.	2. 48' 20"	D.	Nomb.	2. 49' 10"	D.
	Logarith.			Logarith.			Logarith.	
10050	4.002166	43	10100	4.004321	43	10150	4.006466	43
10051	4.002209	43	10101	4.004364	43	10151	4.006509	43
10052	4.002252	44	10102	4.004407	43	10152	4.006552	42
10053	4.002296	43	10103	4.004450	43	10153	4.006594	43
10054	4.002339	43	10104	4.004493	43	10154	4.006637	43
10055	4.002382	43	10105	4.004536	43	10155	4.006680	43
10056	4.002425	43	10106	4.004579	43	10156	4.006723	42
10057	4.002468	44	10107	4.004622	43	10157	4.006765	43
10058	4.002512	43	10108	4.004665	43	10158	4.006808	43
10059	4.002555	43	10109	4.004708	43	10159	4.006851	43
10060	4.002598	43	10110	4.004751	43	10160	4.006894	42
10061	4.002641	43	10111	4.004794	43	10161	4.006936	43
10062	4.002684	43	10112	4.004837	43	10162	4.006979	43
10063	4.002727	44	10113	4.004880	43	10163	4.007022	43
10064	4.002771	43	10114	4.004923	43	10164	4.007065	42
10065	4.002814	43	10115	4.004966	43	10165	4.007107	43
10066	4.002857	43	10116	4.005009	43	10166	4.007150	43
10067	4.002900	43	10117	4.005052	43	10167	4.007193	43
10068	4.002943	43	10118	4.005095	43	10168	4.007236	42
10069	4.002986	43	10119	4.005138	43	10169	4.007278	43
10070	4.003029	44	10120	4.005181	42	10170	4.007321	43
10071	4.003073	43	10121	4.005223	43	10171	4.007364	42
10072	4.003116	43	10122	4.005266	43	10172	4.007406	43
10073	4.003159	43	10123	4.005309	43	10173	4.007449	43
10074	4.003202	43	10124	4.005352	43	10174	4.007492	42
10075	4.003245	43	10125	4.005395	43	10175	4.007534	43
10076	4.003288	43	10126	4.005438	43	10176	4.007577	43
10077	4.003331	43	10127	4.005481	43	10177	4.007620	42
10078	4.003374	43	10128	4.005524	43	10178	4.007662	43
10079	4.003417	44	10129	4.005567	42	10179	4.007705	43
10080	4.003461	43	10130	4.005609	43	10180	4.007748	42
10081	4.003504	43	10131	4.005652	43	10181	4.007790	43
10082	4.003547	43	10132	4.005695	43	10182	4.007833	43
10083	4.003590	43	10133	4.005738	43	10183	4.007876	42
10084	4.003633	43	10134	4.005781	43	10184	4.007918	43
10085	4.003676	43	10135	4.005824	43	10185	4.007961	43
10086	4.003719	43	10136	4.005867	42	10186	4.008004	42
10087	4.003762	43	10137	4.005909	43	10187	4.008046	43
10088	4.003805	43	10138	4.005952	43	10188	4.008089	43
10089	4.003848	43	10139	4.005995	43	10189	4.008132	42
10090	4.003891	43	10140	4.006038	43	10190	4.008174	43
10091	4.003934	43	10141	4.006081	43	10191	4.008217	42
10092	4.003977	43	10142	4.006124	42	10192	4.008259	43
10093	4.004020	43	10143	4.006166	43	10193	4.008302	43
10094	4.004063	43	10144	4.006209	43	10194	4.008345	42
10095	4.004106	43	10145	4.006252	43	10195	4.008387	43
10096	4.004149	43	10146	4.006295	43	10196	4.008430	42
10097	4.004192	43	10147	4.006338	42	10197	4.008472	43
10098	4.004235	43	10148	4.006380	43	10198	4.008515	43
10099	4.004278	43	10149	4.006423	43	10199	4.008558	42
10100	4.004321	43	10150	4.006466	43	10200	4.008600	42

Nomb.	2. 50' 0"	D.	Nomb.	2. 50' 50"	D.	Nomb.	2. 51' 40"	D.
10200	4.008600		10250	4.010724		10300	4.012837	42
10201	4.008643	43	10251	4.010766	42	10301	4.012879	43
10202	4.008685	42	10252	4.010809	43	10302	4.012922	42
10203	4.008728	43	10253	4.010851	42	10303	4.012964	42
10204	4.008770	42	10254	4.010893	42	10304	4.013006	42
		43			43			42
10205	4.008813	43	10255	4.010936	42	10305	4.013048	42
10206	4.008856	42	10256	4.010978	42	10306	4.013090	42
10207	4.008898	43	10257	4.011020	42	10307	4.013132	42
10208	4.008941	42	10258	4.011063	43	10308	4.013174	42
10209	4.008983	42	10259	4.011105	42	10309	4.013217	43
		43			42			42
10210	4.009026	42	10260	4.011147	42	10310	4.013259	42
10211	4.009068	42	10261	4.011190	43	10311	4.013301	42
10212	4.009111	43	10262	4.011232	42	10312	4.013343	42
10213	4.009153	42	10263	4.011274	42	10313	4.013385	42
10214	4.009196	43	10264	4.011317	43	10314	4.013427	42
		42			42			42
10215	4.009238	42	10265	4.011359	42	10315	4.013469	42
10216	4.009281	43	10266	4.011401	42	10316	4.013511	42
10217	4.009323	42	10267	4.011444	43	10317	4.013553	42
10218	4.009366	43	10268	4.011486	42	10318	4.013596	43
10219	4.009408	42	10269	4.011528	42	10319	4.013638	42
		43			42			42
10220	4.009451	42	10270	4.011570	42	10320	4.013680	42
10221	4.009493	43	10271	4.011613	43	10321	4.013722	42
10222	4.009536	42	10272	4.011655	42	10322	4.013764	42
10223	4.009578	42	10273	4.011697	42	10323	4.013806	42
10224	4.009621	43	10274	4.011740	43	10324	4.013848	42
		42			42			42
10225	4.009663	42	10275	4.011782	42	10325	4.013890	42
10226	4.009706	43	10276	4.011824	42	10326	4.013932	42
10227	4.009748	42	10277	4.011866	42	10327	4.013974	42
10228	4.009791	43	10278	4.011909	43	10328	4.014016	42
10229	4.009833	42	10279	4.011951	42	10329	4.014058	42
		43			42			42
10230	4.009876	42	10280	4.011993	42	10330	4.014100	42
10231	4.009918	42	10281	4.012035	42	10331	4.014142	42
10232	4.009961	43	10282	4.012078	43	10332	4.014184	42
10233	4.010003	42	10283	4.012120	42	10333	4.014226	42
10234	4.010045	42	10284	4.012162	42	10334	4.014268	42
		43			42			42
10235	4.010088	42	10285	4.012204	42	10335	4.014310	42
10236	4.010130	42	10286	4.012247	43	10336	4.014353	42
10237	4.010173	43	10287	4.012289	42	10337	4.014395	42
10238	4.010215	42	10288	4.012331	42	10338	4.014437	42
10239	4.010258	43	10289	4.012373	42	10339	4.014479	42
		42			42			42
10240	4.010300	42	10290	4.012415	42	10340	4.014521	42
10241	4.010342	43	10291	4.012458	43	10341	4.014563	42
10242	4.010385	42	10292	4.012500	42	10342	4.014605	42
10243	4.010427	42	10293	4.012542	42	10343	4.014647	42
10244	4.010470	43	10294	4.012584	42	10344	4.014689	42
		42			42			41
10245	4.010512	42	10295	4.012626	42	10345	4.014730	42
10246	4.010554	42	10296	4.012669	43	10346	4.014772	42
10247	4.010597	43	10297	4.012711	42	10347	4.014814	42
10248	4.010639	42	10298	4.012753	42	10348	4.014856	42
10249	4.010681	42	10299	4.012795	42	10349	4.014898	42
10250	4.010724	43	10300	4.012837	42	10350	4.014940	42

Nomb.	2. 52' 30"	D.	Nomb.	2. 53' 20"	D.	Nomb.	2. 54' 10"	D.
	Logarith.			Logarith.			Logarith.	
10350	4.014940	42	10400	4.017033	42	10450	4.019116	42
10351	4.014982	42	10401	4.017075	42	10451	4.019158	41
10352	4.015024	42	10402	4.017117	42	10452	4.019199	42
10353	4.015066	42	10403	4.017159	41	10453	4.019241	41
10354	4.015108	42	10404	4.017200	42	10454	4.019282	42
10355	4.015150	42	10405	4.017242	42	10455	4.019324	42
10356	4.015192	42	10406	4.017284	42	10456	4.019366	41
10357	4.015234	42	10407	4.017326	41	10457	4.019407	42
10358	4.015276	42	10408	4.017367	42	10458	4.019449	41
10359	4.015318	42	10409	4.017409	42	10459	4.019490	42
10360	4.015360	42	10410	4.017451	41	10460	4.019532	41
10361	4.015402	42	10411	4.017492	42	10461	4.019573	42
10362	4.015444	41	10412	4.017534	42	10462	4.019615	41
10363	4.015485	42	10413	4.017576	42	10463	4.019656	42
10364	4.015527	42	10414	4.017618	41	10464	4.019698	41
10365	4.015569	42	10415	4.017659	42	10465	4.019739	42
10366	4.015611	42	10416	4.017701	42	10466	4.019781	41
10367	4.015653	42	10417	4.017743	41	10467	4.019822	42
10368	4.015695	42	10418	4.017784	42	10468	4.019864	41
10369	4.015737	42	10419	4.017826	42	10469	4.019905	42
10370	4.015779	42	10420	4.017868	41	10470	4.019947	41
10371	4.015821	42	10421	4.017909	42	10471	4.019988	42
10372	4.015863	41	10422	4.017951	42	10472	4.020030	41
10373	4.015904	42	10423	4.017993	41	10473	4.020071	42
10374	4.015946	42	10424	4.018034	42	10474	4.020113	41
10375	4.015988	42	10425	4.018076	42	10475	4.020154	41
10376	4.016030	42	10426	4.018118	41	10476	4.020195	42
10377	4.016072	42	10427	4.018159	42	10477	4.020237	41
10378	4.016114	42	10428	4.018201	42	10478	4.020278	42
10379	4.016156	41	10429	4.018243	41	10479	4.020320	41
10380	4.016197	42	10430	4.018284	42	10480	4.020361	42
10381	4.016239	42	10431	4.018326	42	10481	4.020403	41
10382	4.016281	42	10432	4.018368	41	10482	4.020444	42
10383	4.016323	42	10433	4.018409	42	10483	4.020486	41
10384	4.016365	42	10434	4.018451	41	10484	4.020527	41
10385	4.016407	41	10435	4.018492	42	10485	4.020568	42
10386	4.016448	42	10436	4.018534	42	10486	4.020610	41
10387	4.016490	42	10437	4.018576	41	10487	4.020651	42
10388	4.016532	42	10438	4.018617	42	10488	4.020693	41
10389	4.016574	42	10439	4.018659	41	10489	4.020734	41
10390	4.016616	41	10440	4.018700	42	10490	4.020775	42
10391	4.016657	42	10441	4.018742	42	10491	4.020817	41
10392	4.016699	42	10442	4.018784	41	10492	4.020858	42
10393	4.016741	42	10443	4.018825	42	10493	4.020900	41
10394	4.016783	41	10444	4.018867	41	10494	4.020941	41
10395	4.016824	42	10445	4.018908	42	10495	4.020982	42
10396	4.016866	42	10446	4.018950	42	10496	4.021024	41
10397	4.016908	42	10447	4.018992	41	10497	4.021065	42
10398	4.016950	42	10448	4.019033	42	10498	4.021107	41
10399	4.016992	41	10449	4.019075	41	10499	4.021148	41
10400	4.017033	41	10450	4.019116	41	10500	4.021189	41

Nomb.	2. 55' 0"	D.	Nomb.	2. 55' 50"	D.	Nomb.	2. 56' 40"	D.
	Logarith.			Logarith.			Logarith.	
10500	4.021189	42	10550	4.023252	42	10600	4.025306	41
10501	4.021231	41	10551	4.023294	41	10601	4.025347	41
10502	4.021272	41	10552	4.023335	41	10602	4.025388	41
10503	4.021313	41	10553	4.023376	41	10603	4.025429	41
10504	4.021355	42	10554	4.023417	41	10604	4.025470	41
10505	4.021396	41	10555	4.023458	41	10605	4.025511	41
10506	4.021437	41	10556	4.023499	42	10606	4.025552	41
10507	4.021479	41	10557	4.023541	41	10607	4.025593	41
10508	4.021520	41	10558	4.023582	41	10608	4.025634	40
10509	4.021561	42	10559	4.023623	41	10609	4.025674	41
10510	4.021603	41	10560	4.023664	41	10610	4.025715	41
10511	4.021644	41	10561	4.023705	41	10611	4.025756	41
10512	4.021685	42	10562	4.023746	41	10612	4.025797	41
10513	4.021727	41	10563	4.023787	41	10613	4.025838	41
10514	4.021768	41	10564	4.023828	42	10614	4.025879	41
10515	4.021809	42	10565	4.023870	41	10615	4.025920	41
10516	4.021851	41	10566	4.023911	41	10616	4.025961	41
10517	4.021892	41	10567	4.023952	41	10617	4.026002	41
10518	4.021933	41	10568	4.023993	41	10618	4.026043	41
10519	4.021974	42	10569	4.024034	41	10619	4.026084	41
10520	4.022016	41	10570	4.024075	41	10620	4.026125	40
10521	4.022057	41	10571	4.024116	41	10621	4.026165	41
10522	4.022098	42	10572	4.024157	41	10622	4.026206	41
10523	4.022140	41	10573	4.024198	41	10623	4.026247	41
10524	4.022181	41	10574	4.024239	41	10624	4.026288	41
10525	4.022222	41	10575	4.024280	41	10625	4.026329	41
10526	4.022263	42	10576	4.024321	42	10626	4.026370	41
10527	4.022305	41	10577	4.024363	41	10627	4.026411	41
10528	4.022346	41	10578	4.024404	41	10628	4.026452	40
10529	4.022387	41	10579	4.024445	41	10629	4.026492	41
10530	4.022428	42	10580	4.024486	41	10630	4.026533	41
10531	4.022470	41	10581	4.024527	41	10631	4.026574	41
10532	4.022511	41	10582	4.024568	41	10632	4.026615	41
10533	4.022552	41	10583	4.024609	41	10633	4.026656	41
10534	4.022593	42	10584	4.024650	41	10634	4.026697	40
10535	4.022635	41	10585	4.024691	41	10635	4.026737	41
10536	4.022676	41	10586	4.024732	41	10636	4.026778	41
10537	4.022717	41	10587	4.024773	41	10637	4.026819	41
10538	4.022758	41	10588	4.024814	41	10638	4.026860	41
10539	4.022799	42	10589	4.024855	41	10639	4.026901	41
10540	4.022841	41	10590	4.024896	41	10640	4.026942	40
10541	4.022882	41	10591	4.024937	41	10641	4.026982	41
10542	4.022923	41	10592	4.024978	41	10642	4.027023	41
10543	4.022964	41	10593	4.025019	41	10643	4.027064	41
10544	4.023005	42	10594	4.025060	41	10644	4.027105	41
10545	4.023047	41	10595	4.025101	41	10645	4.027146	40
10546	4.023088	41	10596	4.025142	41	10646	4.027186	41
10547	4.023129	41	10597	4.025183	41	10647	4.027227	41
10548	4.023170	41	10598	4.025224	41	10648	4.027268	41
10549	4.023211	41	10599	4.025265	41	10649	4.027309	41
10550	4.023252	41	10600	4.025306	41	10650	4.027350	41

Nomb.	2. 57' 30"	D.	Nomb.	2. 58' 20"	D.	Nomb.	2. 59' 10"	D.
	Logarith.			Logarith.			Logarith.	
10650	4.027350	40	10700	4.029384	40	10750	4.031408	41
10651	4.027390	41	10701	4.029424	41	10751	4.031449	40
10652	4.027431	41	10702	4.029465	41	10752	4.031489	41
10653	4.027472	41	10703	4.029506	41	10753	4.031530	40
10654	4.027513	41	10704	4.029546	40	10754	4.031570	40
		40			41			40
10655	4.027553	41	10705	4.029587	40	10755	4.031610	41
10656	4.027594	41	10706	4.029627	41	10756	4.031651	40
10657	4.027635	41	10707	4.029668	40	10757	4.031691	41
10658	4.027676	40	10708	4.029708	41	10758	4.031732	40
10659	4.027716	41	10709	4.029749	40	10759	4.031772	40
		41			41			41
10660	4.027757	41	10710	4.029789	41	10760	4.031812	41
10661	4.027798	41	10711	4.029830	41	10761	4.031853	40
10662	4.027839	40	10712	4.029871	40	10762	4.031893	40
10663	4.027879	41	10713	4.029911	41	10763	4.031933	41
10664	4.027920	41	10714	4.029952	40	10764	4.031974	40
		41			41			40
10665	4.027961	41	10715	4.029992	41	10765	4.032014	40
10666	4.028002	40	10716	4.030033	40	10766	4.032054	41
10667	4.028042	41	10717	4.030073	41	10767	4.032095	40
10668	4.028083	41	10718	4.030114	40	10768	4.032135	40
10669	4.028124	40	10719	4.030154	41	10769	4.032175	41
		41			40			41
10670	4.028164	41	10720	4.030195	40	10770	4.032216	40
10671	4.028205	41	10721	4.030235	41	10771	4.032256	40
10672	4.028246	41	10722	4.030276	40	10772	4.032296	41
10673	4.028287	40	10723	4.030316	41	10773	4.032337	40
10674	4.028327	41	10724	4.030357	40	10774	4.032377	40
		41			41			41
10675	4.028368	41	10725	4.030397	41	10775	4.032417	41
10676	4.028409	40	10726	4.030438	40	10776	4.032458	40
10677	4.028449	41	10727	4.030478	40	10777	4.032498	40
10678	4.028490	41	10728	4.030519	41	10778	4.032538	40
10679	4.028531	40	10729	4.030559	41	10779	4.032578	41
		41			40			40
10680	4.028571	41	10730	4.030600	40	10780	4.032619	40
10681	4.028612	41	10731	4.030640	41	10781	4.032659	40
10682	4.028653	40	10732	4.030681	40	10782	4.032699	41
10683	4.028693	41	10733	4.030721	41	10783	4.032740	40
10684	4.028734	41	10734	4.030762	40	10784	4.032780	40
		40			41			40
10685	4.028775	41	10735	4.030802	41	10785	4.032820	40
10686	4.028815	41	10736	4.030843	40	10786	4.032860	41
10687	4.028856	40	10737	4.030883	40	10787	4.032901	40
10688	4.028896	41	10738	4.030923	41	10788	4.032941	40
10689	4.028937	41	10739	4.030964	40	10789	4.032981	40
		41			41			41
10690	4.028978	40	10740	4.031004	41	10790	4.033021	41
10691	4.029018	41	10741	4.031045	40	10791	4.033062	40
10692	4.029059	41	10742	4.031085	41	10792	4.033102	40
10693	4.029100	40	10743	4.031126	40	10793	4.033142	40
10694	4.029140	41	10744	4.031166	40	10794	4.033182	41
		40			41			41
10695	4.029181	40	10745	4.031206	41	10795	4.033223	40
10696	4.029221	41	10746	4.031247	40	10796	4.033263	40
10697	4.029262	41	10747	4.031287	41	10797	4.033303	40
10698	4.029303	40	10748	4.031328	40	10798	4.033343	41
10699	4.029343	41	10749	4.031368	40	10799	4.033384	40
10700	4.029384	41	10750	4.031408	40	10800	4.033424	40

Nomb.	3. 0' 0"	D.	Nomb.	3. 0' 50"	D.	Nomb.	3. 1' 40"	D.
Logarith.			Logarith.			Logarith.		
10800	4.033424	40	10850	4.035430	40	10900	4.037426	40
10801	4.033464	40	10851	4.035470	40	10901	4.037466	40
10802	4.033504	40	10852	4.035510	40	10902	4.037506	40
10803	4.033544	40	10853	4.035550	40	10903	4.037546	40
10804	4.033585	41	10854	4.035590	40	10904	4.037586	40
10805	4.033625	40	10855	4.035630	40	10905	4.037626	39
10806	4.033665	40	10856	4.035670	40	10906	4.037665	40
10807	4.033705	40	10857	4.035710	40	10907	4.037705	40
10808	4.033745	40	10858	4.035750	40	10908	4.037745	40
10809	4.033786	41	10859	4.035790	40	10909	4.037785	40
10810	4.033826	40	10860	4.035830	40	10910	4.037825	40
10811	4.033866	40	10861	4.035870	40	10911	4.037865	39
10812	4.033906	40	10862	4.035910	40	10912	4.037904	40
10813	4.033946	40	10863	4.035950	40	10913	4.037944	40
10814	4.033986	41	10864	4.035990	40	10914	4.037984	40
10815	4.034027	40	10865	4.036030	40	10915	4.038024	40
10816	4.034067	40	10866	4.036070	40	10916	4.038064	39
10817	4.034107	40	10867	4.036110	40	10917	4.038103	40
10818	4.034147	40	10868	4.036150	40	10918	4.038143	40
10819	4.034187	40	10869	4.036190	40	10919	4.038183	40
10820	4.034227	40	10870	4.036230	39	10920	4.038223	39
10821	4.034267	41	10871	4.036269	40	10921	4.038262	40
10822	4.034308	40	10872	4.036309	40	10922	4.038302	40
10823	4.034348	40	10873	4.036349	40	10923	4.038342	40
10824	4.034388	40	10874	4.036389	40	10924	4.038382	39
10825	4.034428	40	10875	4.036429	40	10925	4.038421	40
10826	4.034468	40	10876	4.036469	40	10926	4.038461	40
10827	4.034508	40	10877	4.036509	40	10927	4.038501	40
10828	4.034548	40	10878	4.036549	40	10928	4.038541	39
10829	4.034588	40	10879	4.036589	40	10929	4.038580	40
10830	4.034628	41	10880	4.036629	40	10930	4.038620	40
10831	4.034669	40	10881	4.036669	40	10931	4.038660	40
10832	4.034709	40	10882	4.036709	40	10932	4.038700	39
10833	4.034749	40	10883	4.036749	40	10933	4.038739	40
10834	4.034789	40	10884	4.036789	39	10934	4.038779	40
10835	4.034829	40	10885	4.036828	40	10935	4.038819	40
10836	4.034869	40	10886	4.036868	40	10936	4.038859	39
10837	4.034909	40	10887	4.036908	40	10937	4.038898	40
10838	4.034949	40	10888	4.036948	40	10938	4.038938	40
10839	4.034989	40	10889	4.036988	40	10939	4.038978	39
10840	4.035029	40	10890	4.037028	40	10940	4.039017	40
10841	4.035069	40	10891	4.037068	40	10941	4.039057	40
10842	4.035109	40	10892	4.037108	40	10942	4.039097	39
10843	4.035149	41	10893	4.037148	39	10943	4.039136	40
10844	4.035189	40	10894	4.037187	40	10944	4.039176	40
10845	4.035230	40	10895	4.037227	40	10945	4.039216	39
10846	4.035270	40	10896	4.037267	40	10946	4.039255	40
10847	4.035310	40	10897	4.037307	40	10947	4.039295	40
10848	4.035350	40	10898	4.037347	40	10948	4.039335	39
10849	4.035390	40	10899	4.037387	39	10949	4.039374	40
10850	4.035430	40	10900	4.037426	40	10950	4.039414	40

Nomb.	3. 2' 30"	D.	Nomb.	3. 3' 20"	D.	Nomb.	3. 4' 10"	D.
	Logarith.			Logarith.			Logarith.	
10950	4.039414	40	11000	4.041393	39	11050	4.043362	40
10951	4.039454	39	11001	4.041432	40	11051	4.043402	39
10952	4.039493	40	11002	4.041472	39	11052	4.043441	39
10953	4.039533	40	11003	4.041511	39	11053	4.043480	39
10954	4.039573	40	11004	4.041551	40	11054	4.043519	39
		39			39			40
10955	4.039612	40	11005	4.041590	40	11055	4.043559	39
10956	4.039652	40	11006	4.041630	39	11056	4.043598	39
10957	4.039692	39	11007	4.041669	39	11057	4.043637	40
10958	4.039731	40	11008	4.041708	40	11058	4.043677	39
10959	4.039771	40	11009	4.041748	39	11059	4.043716	39
		39			40			40
10960	4.039811	39	11010	4.041787	40	11060	4.043755	39
10961	4.039850	40	11011	4.041827	39	11061	4.043794	40
10962	4.039890	39	11012	4.041866	40	11062	4.043834	39
10963	4.039929	40	11013	4.041906	39	11063	4.043873	39
10964	4.039969	40	11014	4.041945	39	11064	4.043912	39
		40			40			39
10965	4.040009	39	11015	4.041985	39	11065	4.043951	40
10966	4.040048	40	11016	4.042024	39	11066	4.043991	39
10967	4.040088	39	11017	4.042063	40	11067	4.044030	39
10968	4.040127	40	11018	4.042103	39	11068	4.044069	39
10969	4.040167	40	11019	4.042142	40	11069	4.044108	40
		39			39			39
10970	4.040207	39	11020	4.042182	39	11070	4.044148	39
10971	4.040246	40	11021	4.042221	39	11071	4.044187	39
10972	4.040286	39	11022	4.042260	40	11072	4.044226	39
10973	4.040325	40	11023	4.042300	39	11073	4.044265	40
10974	4.040365	40	11024	4.042339	40	11074	4.044305	39
		40			39			39
10975	4.040405	39	11025	4.042379	39	11075	4.044344	39
10976	4.040444	40	11026	4.042418	39	11076	4.044383	39
10977	4.040484	39	11027	4.042457	40	11077	4.044422	39
10978	4.040523	40	11028	4.042497	39	11078	4.044461	40
10979	4.040563	39	11029	4.042536	40	11079	4.044501	39
		40			39			39
10980	4.040602	40	11030	4.042576	39	11080	4.044540	39
10981	4.040642	39	11031	4.042615	39	11081	4.044579	39
10982	4.040681	40	11032	4.042654	40	11082	4.044618	39
10983	4.040721	40	11033	4.042694	39	11083	4.044657	40
10984	4.040761	39	11034	4.042733	39	11084	4.044697	39
		40			40			39
10985	4.040800	40	11035	4.042772	40	11085	4.044736	39
10986	4.040840	39	11036	4.042812	39	11086	4.044775	39
10987	4.040879	40	11037	4.042851	39	11087	4.044814	39
10988	4.040919	39	11038	4.042890	40	11088	4.044853	39
10989	4.040958	40	11039	4.042930	39	11089	4.044892	40
		39			40			39
10990	4.040998	39	11040	4.042969	39	11090	4.044932	39
10991	4.041037	40	11041	4.043008	40	11091	4.044971	39
10992	4.041077	39	11042	4.043048	39	11092	4.045010	39
10993	4.041116	40	11043	4.043087	39	11093	4.045049	39
10994	4.041156	39	11044	4.043126	40	11094	4.045088	39
		40			39			39
10995	4.041195	40	11045	4.043166	39	11095	4.045127	39
10996	4.041235	39	11046	4.043205	39	11096	4.045166	40
10997	4.041274	40	11047	4.043244	40	11097	4.045206	39
10998	4.041314	39	11048	4.043284	39	11098	4.045245	39
10999	4.041353	40	11049	4.043323	39	11099	4.045284	39
11000	4.041393	40	11050	4.043362	39	11100	4.045323	39

Nomb.	3. 5' 0"	D.	Nomb.	3. 5' 50"	D.	Nomb.	3. 6' 40"	D.
11100	4.045323		11150	4.047275		11200	4.049218	
11101	4.045362	39	11151	4.047314	39	11201	4.049257	39
11102	4.045401	39	11152	4.047353	39	11202	4.049296	39
11103	4.045440	39	11153	4.047392	39	11203	4.049334	38
11104	4.045479	39	11154	4.047431	39	11204	4.049373	39
		40			39			39
11105	4.045519	39	11155	4.047470	39	11205	4.049412	39
11106	4.045558	39	11156	4.047509	39	11206	4.049451	39
11107	4.045597	39	11157	4.047547	38	11207	4.049489	38
11108	4.045636	39	11158	4.047586	39	11208	4.049528	39
11109	4.045675	39	11159	4.047625	39	11209	4.049567	39
		39			39			39
11110	4.045714	39	11160	4.047664	39	11210	4.049606	38
11111	4.045753	39	11161	4.047703	39	11211	4.049644	38
11112	4.045792	39	11162	4.047742	39	11212	4.049683	39
11113	4.045831	39	11163	4.047781	39	11213	4.049722	39
11114	4.045870	39	11164	4.047820	39	11214	4.049761	38
		39			39			38
11115	4.045909	40	11165	4.047859	39	11215	4.049799	39
11116	4.045949	39	11166	4.047898	39	11216	4.049838	39
11117	4.045988	39	11167	4.047937	39	11217	4.049877	39
11118	4.046027	39	11168	4.047975	38	11218	4.049915	38
11119	4.046066	39	11169	4.048014	39	11219	4.049954	39
		39			39			39
11120	4.046105	39	11170	4.048053	39	11220	4.049993	39
11121	4.046144	39	11171	4.048092	39	11221	4.050032	39
11122	4.046183	39	11172	4.048131	39	11222	4.050070	38
11123	4.046222	39	11173	4.048170	39	11223	4.050109	39
11124	4.046261	39	11174	4.048209	39	11224	4.050148	39
		39			39			38
11125	4.046300	39	11175	4.048248	39	11225	4.050186	39
11126	4.046339	39	11176	4.048286	39	11226	4.050225	39
11127	4.046378	39	11177	4.048325	39	11227	4.050264	39
11128	4.046417	39	11178	4.048364	39	11228	4.050302	38
11129	4.046456	39	11179	4.048403	39	11229	4.050341	39
		39			39			39
11130	4.046495	39	11180	4.048442	39	11230	4.050380	39
11131	4.046534	39	11181	4.048481	39	11231	4.050418	38
11132	4.046573	39	11182	4.048519	39	11232	4.050457	39
11133	4.046612	39	11183	4.048558	39	11233	4.050496	39
11134	4.046651	39	11184	4.048597	39	11234	4.050534	38
		39			39			39
11135	4.046690	39	11185	4.048636	39	11235	4.050573	39
11136	4.046729	39	11186	4.048675	39	11236	4.050612	39
11137	4.046768	39	11187	4.048714	39	11237	4.050650	38
11138	4.046807	39	11188	4.048752	38	11238	4.050689	39
11139	4.046846	39	11189	4.048791	39	11239	4.050728	39
		39			39			38
11140	4.046885	39	11190	4.048830	39	11240	4.050766	39
11141	4.046924	39	11191	4.048869	39	11241	4.050805	39
11142	4.046963	39	11192	4.048908	39	11242	4.050844	39
11143	4.047002	39	11193	4.048947	39	11243	4.050882	38
11144	4.047041	39	11194	4.048985	38	11244	4.050921	39
		39			39			38
11145	4.047080	39	11195	4.049024	39	11245	4.050959	39
11146	4.047119	39	11196	4.049063	39	11246	4.050998	39
11147	4.047158	39	11197	4.049102	39	11247	4.051037	39
11148	4.047197	39	11198	4.049140	38	11248	4.051075	38
11149	4.047236	39	11199	4.049179	39	11249	4.051114	39
11150	4.047275	39	11200	4.049218	39	11250	4.051153	39

Nomb.	3. 7' 30"	D.	Nomb.	3. 8' 20"	D.	Nomb.	3. 9. 10"	D.
	Logarith.			Logarith.			Logarith.	
11250	4.051153	38	11300	4.053078	39	11350	4.054996	38
11251	4.051191	39	11301	4.053117	38	11351	4.055034	38
11252	4.051230	38	11302	4.053155	39	11352	4.055072	39
11253	4.051268	39	11303	4.053194	38	11353	4.055111	38
11254	4.051307	38	11304	4.053232	39	11354	4.055149	38
11255	4.051345	39	11305	4.053271	38	11355	4.055187	38
11256	4.051384	39	11306	4.053309	38	11356	4.055225	39
11257	4.051423	38	11307	4.053347	39	11357	4.055264	38
11258	4.051461	39	11308	4.053386	38	11358	4.055302	38
11259	4.051500	38	11309	4.053424	39	11359	4.055340	38
11260	4.051538	39	11310	4.053463	38	11360	4.055378	39
11261	4.051577	39	11311	4.053501	38	11361	4.055417	38
11262	4.051616	38	11312	4.053539	39	11362	4.055455	38
11263	4.051654	39	11313	4.053578	38	11363	4.055493	38
11264	4.051693	38	11314	4.053616	39	11364	4.055531	38
11265	4.051731	39	11315	4.053655	38	11365	4.055569	39
11266	4.051770	38	11316	4.053693	38	11366	4.055608	38
11267	4.051808	39	11317	4.053731	39	11367	4.055646	38
11268	4.051847	38	11318	4.053770	38	11368	4.055684	38
11269	4.051885	39	11319	4.053808	38	11369	4.055722	38
11270	4.051924	38	11320	4.053846	39	11370	4.055760	39
11271	4.051962	39	11321	4.053885	38	11371	4.055799	38
11272	4.052001	39	11322	4.053923	39	11372	4.055837	38
11273	4.052040	38	11323	4.053962	38	11373	4.055875	38
11274	4.052078	39	11324	4.054000	38	11374	4.055913	38
11275	4.052117	38	11325	4.054038	39	11375	4.055951	39
11276	4.052155	39	11326	4.054077	38	11376	4.055990	38
11277	4.052194	38	11327	4.054115	38	11377	4.056028	38
11278	4.052232	39	11328	4.054153	39	11378	4.056066	38
11279	4.052271	38	11329	4.054192	38	11379	4.056104	38
11280	4.052309	39	11330	4.054230	38	11380	4.056142	38
11281	4.052348	38	11331	4.054268	39	11381	4.056180	39
11282	4.052386	39	11332	4.054307	38	11382	4.056219	38
11283	4.052425	38	11333	4.054345	38	11383	4.056257	38
11284	4.052463	39	11334	4.054383	39	11384	4.056295	38
11285	4.052502	38	11335	4.054422	38	11385	4.056333	38
11286	4.052540	39	11336	4.054460	38	11386	4.056371	38
11287	4.052579	38	11337	4.054498	38	11387	4.056409	38
11288	4.052617	38	11338	4.054536	39	11388	4.056447	39
11289	4.052655	39	11339	4.054575	38	11389	4.056486	38
11290	4.052694	38	11340	4.054613	38	11390	4.056524	38
11291	4.052732	39	11341	4.054651	39	11391	4.056562	38
11292	4.052771	38	11342	4.054690	38	11392	4.056600	38
11293	4.052809	39	11343	4.054728	38	11393	4.056638	38
11294	4.052848	38	11344	4.054766	39	11394	4.056676	38
11295	4.052886	39	11345	4.054805	38	11395	4.056714	38
11296	4.052925	38	11346	4.054843	38	11396	4.056752	39
11297	4.052963	39	11347	4.054881	38	11397	4.056791	38
11298	4.053002	38	11348	4.054919	39	11398	4.056829	38
11299	4.053040	38	11349	4.054958	38	11399	4.056867	38
11300	4.053078		11350	4.054996		11400	4.056905	

Nomb.	3. 10' 0"	D.	Nomb.	3. 10' 50"	D.	Nomb.	3. 11' 40"	D.
Logarith.			Logarith.			Logarith.		
11400	4.056905	38	11450	4.058805	38	11500	4.060608	38
11401	4.056943	38	11451	4.058843	38	11501	4.060736	37
11402	4.056981	38	11452	4.058881	38	11502	4.060773	38
11403	4.057019	38	11453	4.058919	38	11503	4.060811	38
11404	4.057057	38	11454	4.058957	38	11504	4.060849	38
11405	4.057095	38	11455	4.058995	38	11505	4.060887	37
11406	4.057133	38	11456	4.059033	38	11506	4.060924	38
11407	4.057171	39	11457	4.059071	38	11507	4.060962	38
11408	4.057210	38	11458	4.059109	38	11508	4.061000	38
11409	4.057248	38	11459	4.059147	38	11509	4.061038	37
11410	4.057286	38	11460	4.059185	38	11510	4.061075	38
11411	4.057324	38	11461	4.059223	37	11511	4.061113	38
11412	4.057362	38	11462	4.059260	38	11512	4.061151	38
11413	4.057400	38	11463	4.059298	38	11513	4.061189	37
11414	4.057438	38	11464	4.059336	38	11514	4.061226	38
11415	4.057476	38	11465	4.059374	38	11515	4.061264	38
11416	4.057514	38	11466	4.059412	38	11516	4.061302	37
11417	4.057552	38	11467	4.059450	38	11517	4.061339	38
11418	4.057590	38	11468	4.059488	38	11518	4.061377	38
11419	4.057628	38	11469	4.059526	37	11519	4.061415	37
11420	4.057666	38	11470	4.059563	38	11520	4.061452	38
11421	4.057704	38	11471	4.059601	38	11521	4.061490	38
11422	4.057742	38	11472	4.059639	38	11522	4.061528	38
11423	4.057780	38	11473	4.059677	38	11523	4.061566	37
11424	4.057818	38	11474	4.059715	38	11524	4.061603	38
11425	4.057856	38	11475	4.059753	38	11525	4.061641	38
11426	4.057894	38	11476	4.059791	37	11526	4.061679	37
11427	4.057932	38	11477	4.059828	38	11527	4.061716	38
11428	4.057970	38	11478	4.059866	38	11528	4.061754	38
11429	4.058008	38	11479	4.059904	38	11529	4.061792	37
11430	4.058046	38	11480	4.059942	38	11530	4.061829	38
11431	4.058084	38	11481	4.059980	38	11531	4.061867	38
11432	4.058122	38	11482	4.060018	37	11532	4.061905	37
11433	4.058160	38	11483	4.060055	38	11533	4.061942	38
11434	4.058198	38	11484	4.060093	38	11534	4.061980	38
11435	4.058236	38	11485	4.060131	38	11535	4.062018	37
11436	4.058274	38	11486	4.060169	38	11536	4.062055	38
11437	4.058312	38	11487	4.060207	37	11537	4.062093	38
11438	4.058350	38	11488	4.060244	38	11538	4.062131	37
11439	4.058388	38	11489	4.060282	38	11539	4.062168	38
11440	4.058426	38	11490	4.060320	38	11540	4.062206	37
11441	4.058464	38	11491	4.060358	38	11541	4.062243	38
11442	4.058502	38	11492	4.060396	37	11542	4.062281	38
11443	4.058540	38	11493	4.060433	38	11543	4.062319	37
11444	4.058578	38	11494	4.060471	38	11544	4.062356	38
11445	4.058616	38	11495	4.060509	38	11545	4.062394	38
11446	4.058654	38	11496	4.060547	38	11546	4.062432	37
11447	4.058692	38	11497	4.060585	37	11547	4.062469	38
11448	4.058730	38	11498	4.060622	38	11548	4.062507	37
11449	4.058768	37	11499	4.060660	38	11549	4.062544	38
11450	4.058805		11500	4.060698		11550	4.062582	

Nomb.	3. 12' 30"	D.	Nomb.	3. 13' 20"	D.	Nomb.	3. 14' 10"	D.
	Logarith.			Logarith.			Logarith.	
11550	4.062582	38	11600	4.064458	37	11650	4.066326	37
11551	4.062620	37	11601	4.064495	38	11651	4.066363	37
11552	4.062657	38	11602	4.064533	37	11652	4.066400	38
11553	4.062695	37	11603	4.064570	38	11653	4.066438	37
11554	4.062732	38	11604	4.064608	37	11654	4.066475	37
11555	4.062770	38	11605	4.064645	38	11655	4.066512	38
11556	4.062808	37	11606	4.064683	37	11656	4.066550	37
11557	4.062845	38	11607	4.064720	37	11657	4.066587	37
11558	4.062883	37	11608	4.064757	38	11658	4.066624	37
11559	4.062920	38	11609	4.064795	37	11659	4.066661	38
11560	4.062958	37	11610	4.064832	38	11660	4.066699	37
11561	4.062995	38	11611	4.064870	37	11661	4.066736	37
11562	4.063033	38	11612	4.064907	37	11662	4.066773	37
11563	4.063071	37	11613	4.064944	38	11663	4.066810	38
11564	4.063108	38	11614	4.064982	37	11664	4.066848	37
11565	4.063146	37	11615	4.065019	38	11665	4.066885	37
11566	4.063183	38	11616	4.065057	37	11666	4.066922	37
11567	4.063221	37	11617	4.065094	37	11667	4.066959	37
11568	4.063258	38	11618	4.065131	38	11668	4.066996	38
11569	4.063296	37	11619	4.065169	37	11669	4.067034	37
11570	4.063333	38	11620	4.065206	38	11670	4.067071	37
11571	4.063371	37	11621	4.065244	37	11671	4.067108	37
11572	4.063408	38	11622	4.065281	37	11672	4.067145	37
11573	4.063446	37	11623	4.065318	38	11673	4.067182	38
11574	4.063483	38	11624	4.065356	37	11674	4.067220	37
11575	4.063521	38	11625	4.065393	37	11675	4.067257	37
11576	4.063559	37	11626	4.065430	38	11676	4.067294	37
11577	4.063596	38	11627	4.065468	37	11677	4.067331	37
11578	4.063634	37	11628	4.065505	37	11678	4.067368	38
11579	4.063671	38	11629	4.065542	38	11679	4.067406	37
11580	4.063709	37	11630	4.065580	37	11680	4.067443	37
11581	4.063746	38	11631	4.065617	37	11681	4.067480	37
11582	4.063784	37	11632	4.065654	38	11682	4.067517	37
11583	4.063821	38	11633	4.065692	37	11683	4.067554	38
11584	4.063859	37	11634	4.065729	37	11684	4.067592	37
11585	4.063896	38	11635	4.065766	38	11685	4.067629	37
11586	4.063934	37	11636	4.065804	37	11686	4.067666	37
11587	4.063971	37	11637	4.065841	37	11687	4.067703	37
11588	4.064008	38	11638	4.065878	38	11688	4.067740	37
11589	4.064046	37	11639	4.065916	37	11689	4.067777	38
11590	4.064083	38	11640	4.065953	37	11690	4.067815	37
11591	4.064121	37	11641	4.065990	38	11691	4.067852	37
11592	4.064158	38	11642	4.066028	37	11692	4.067889	37
11593	4.064196	37	11643	4.066065	37	11693	4.067926	37
11594	4.064233	38	11644	4.066102	37	11694	4.067963	37
11595	4.064271	37	11645	4.066139	38	11695	4.068000	37
11596	4.064308	38	11646	4.066177	37	11696	4.068037	37
11597	4.064346	37	11647	4.066214	37	11697	4.068074	38
11598	4.064383	38	11648	4.066251	38	11698	4.068112	37
11599	4.064421	37	11649	4.066289	37	11699	4.068149	37
11600	4.064458	37	11650	4.066326	37	11700	4.068186	37

Nomb.	3. 15' 0"	D.	Nomb.	3. 15' 50"	D.	Nomb.	3. 16' 40"	D.
11700	4.068186		11750	4.070038	37	11800	4.071882	37
11701	4.068223	37	11751	4.070075	37	11801	4.071919	37
11702	4.068260	37	11752	4.070112	37	11802	4.071956	36
11703	4.068297	37	11753	4.070149	37	11803	4.071992	37
11704	4.068334	37	11754	4.070186	37	11804	4.072029	37
		37			37			37
11705	4.068371	38	11755	4.070223	37	11805	4.072066	37
11706	4.068409	37	11756	4.070260	37	11806	4.072103	37
11707	4.068446	37	11757	4.070297	36	11807	4.072140	36
11708	4.068483	37	11758	4.070333	37	11808	4.072176	37
11709	4.068520	37	11759	4.070370	37	11809	4.072213	37
		37			37			37
11710	4.068557	37	11760	4.070407	37	11810	4.072250	37
11711	4.068594	37	11761	4.070444	37	11811	4.072287	36
11712	4.068631	37	11762	4.070481	37	11812	4.072323	37
11713	4.068668	37	11763	4.070518	37	11813	4.072360	37
11714	4.068705	37	11764	4.070555	37	11814	4.072397	37
		37			37			37
11715	4.068742	37	11765	4.070592	37	11815	4.072434	36
11716	4.068779	37	11766	4.070629	37	11816	4.072470	37
11717	4.068816	37	11767	4.070666	37	11817	4.072507	37
11718	4.068853	38	11768	4.070703	37	11818	4.072544	37
11719	4.068891	37	11769	4.070740	36	11819	4.072581	36
		37			37			37
11720	4.068928	37	11770	4.070776	37	11820	4.072617	37
11721	4.068965	37	11771	4.070813	37	11821	4.072654	37
11722	4.069002	37	11772	4.070850	37	11822	4.072691	37
11723	4.069039	37	11773	4.070887	37	11823	4.072728	36
11724	4.069076	37	11774	4.070924	37	11824	4.072764	37
		37			37			37
11725	4.069113	37	11775	4.070961	37	11825	4.072801	37
11726	4.069150	37	11776	4.070998	37	11826	4.072838	37
11727	4.069187	37	11777	4.071035	37	11827	4.072875	36
11728	4.069224	37	11778	4.071072	36	11828	4.072911	37
11729	4.069261	37	11779	4.071108	37	11829	4.072948	37
		37			37			37
11730	4.069298	37	11780	4.071145	37	11830	4.072985	36
11731	4.069335	37	11781	4.071182	37	11831	4.073021	37
11732	4.069372	37	11782	4.071219	37	11832	4.073058	37
11733	4.069409	37	11783	4.071256	37	11833	4.073095	37
11734	4.069446	37	11784	4.071293	37	11834	4.073132	36
		37			37			37
11735	4.069483	37	11785	4.071330	36	11835	4.073168	37
11736	4.069520	37	11786	4.071366	37	11836	4.073205	37
11737	4.069557	37	11787	4.071403	37	11837	4.073242	36
11738	4.069594	37	11788	4.071440	37	11838	4.073278	37
11739	4.069631	37	11789	4.071477	37	11839	4.073315	37
		37			37			37
11740	4.069668	37	11790	4.071514	37	11840	4.073352	36
11741	4.069705	37	11791	4.071551	36	11841	4.073388	37
11742	4.069742	37	11792	4.071587	37	11842	4.073425	37
11743	4.069779	37	11793	4.071624	37	11843	4.073462	36
11744	4.069816	37	11794	4.071661	37	11844	4.073498	37
		37			37			37
11745	4.069853	37	11795	4.071698	37	11845	4.073535	37
11746	4.069890	37	11796	4.071735	37	11846	4.073572	36
11747	4.069927	37	11797	4.071772	36	11847	4.073608	37
11748	4.069964	37	11798	4.071808	37	11848	4.073645	37
11749	4.070001	37	11799	4.071845	37	11849	4.073682	36
11750	4.070038	37	11800	4.071882	37	11850	4.073718	36

Nomb.	3. 17' 30"	D.	Nomb.	3. 18' 20"	D.	Nomb.	3. 19' 10"	D.
	Logarith.			Logarith.			Logarith.	
11850	4.073718	37	11900	4.075547	36	11950	4.077368	36
11851	4.073755	37	11901	4.075583	37	11951	4.077404	37
11852	4.073792	37	11902	4.075620	36	11952	4.077441	36
11853	4.073828	36	11903	4.075656	37	11953	4.077477	36
11854	4.073865	37	11904	4.075693	37	11954	4.077513	37
11855	4.073902	37	11905	4.075729	37	11955	4.077550	36
11856	4.073938	36	11906	4.075766	36	11956	4.077586	36
11857	4.073975	37	11907	4.075802	37	11957	4.077622	37
11858	4.074011	36	11908	4.075839	36	11958	4.077659	36
11859	4.074048	37	11909	4.075875	37	11959	4.077695	36
11860	4.074085	37	11910	4.075912	36	11960	4.077731	36
11861	4.074121	36	11911	4.075948	37	11961	4.077767	37
11862	4.074158	37	11912	4.075985	36	11962	4.077804	36
11863	4.074195	37	11913	4.076021	37	11963	4.077840	36
11864	4.074231	36	11914	4.076058	36	11964	4.077876	37
11865	4.074268	36	11915	4.076094	36	11965	4.077913	36
11866	4.074304	37	11916	4.076130	37	11966	4.077949	36
11867	4.074341	37	11917	4.076167	36	11967	4.077985	37
11868	4.074378	36	11918	4.076203	37	11968	4.078022	36
11869	4.074414	37	11919	4.076240	36	11969	4.078058	36
11870	4.074451	36	11920	4.076276	37	11970	4.078094	36
11871	4.074487	37	11921	4.076313	36	11971	4.078130	37
11872	4.074524	37	11922	4.076349	37	11972	4.078167	36
11873	4.074560	36	11923	4.076386	36	11973	4.078203	36
11874	4.074597	37	11924	4.076422	36	11974	4.078239	37
11875	4.074634	36	11925	4.076458	37	11975	4.078276	36
11876	4.074670	37	11926	4.076495	36	11976	4.078312	36
11877	4.074707	36	11927	4.076531	37	11977	4.078348	36
11878	4.074743	37	11928	4.076568	36	11978	4.078384	37
11879	4.074780	36	11929	4.076604	36	11979	4.078421	36
11880	4.074816	37	11930	4.076640	37	11980	4.078457	36
11881	4.074853	37	11931	4.076677	36	11981	4.078493	36
11882	4.074890	36	11932	4.076713	37	11982	4.078529	37
11883	4.074926	37	11933	4.076750	36	11983	4.078566	36
11884	4.074963	36	11934	4.076786	36	11984	4.078602	36
11885	4.074999	37	11935	4.076822	37	11985	4.078638	36
11886	4.075036	36	11936	4.076859	36	11986	4.078674	37
11887	4.075072	37	11937	4.076895	37	11987	4.078711	36
11888	4.075109	36	11938	4.076932	36	11988	4.078747	36
11889	4.075145	37	11939	4.076968	36	11989	4.078783	36
11890	4.075182	36	11940	4.077004	37	11990	4.078819	36
11891	4.075218	37	11941	4.077041	36	11991	4.078855	37
11892	4.075255	36	11942	4.077077	36	11992	4.078892	36
11893	4.075291	37	11943	4.077113	37	11993	4.078928	36
11894	4.075328	36	11944	4.077150	36	11994	4.078964	36
11895	4.075364	37	11945	4.077186	37	11995	4.079000	36
11896	4.075401	36	11946	4.077223	36	11996	4.079036	37
11897	4.075437	37	11947	4.077259	36	11997	4.079073	36
11898	4.075474	36	11948	4.077295	37	11998	4.079109	36
11899	4.075510	37	11949	4.077332	36	11999	4.079145	36
11900	4.075547	37	11950	4.077368	36	12000	4.079181	36

Nomb.	3. 20' 0"	D.	Nomb.	3. 20' 50"	D.	Nomb.	3. 21' 40"	D.
	Logarith.			Logarith.			Logarith.	
12000	4.079181	36	12050	4.080987	36	12100	4.082785	36
12001	4.079217	37	12051	4.081023	36	12101	4.082821	36
12002	4.079254	36	12052	4.081059	36	12102	4.082857	36
12003	4.079290	36	12053	4.081095	36	12103	4.082893	36
12004	4.079326	36	12054	4.081131	36	12104	4.082929	36
12005	4.079362	36	12055	4.081167	36	12105	4.082965	36
12006	4.079398	37	12056	4.081203	36	12106	4.083001	36
12007	4.079435	36	12057	4.081239	36	12107	4.083037	35
12008	4.079471	36	12058	4.081275	36	12108	4.083072	36
12009	4.079507	36	12059	4.081311	36	12109	4.083108	36
12010	4.079543	36	12060	4.081347	36	12110	4.083144	36
12011	4.079579	36	12061	4.081383	36	12111	4.083180	36
12012	4.079615	36	12062	4.081419	36	12112	4.083216	36
12013	4.079651	37	12063	4.081455	36	12113	4.083252	36
12014	4.079688	36	12064	4.081491	36	12114	4.083288	35
12015	4.079724	36	12065	4.081527	36	12115	4.083323	36
12016	4.079760	36	12066	4.081563	36	12116	4.083359	36
12017	4.079796	36	12067	4.081599	36	12117	4.083395	36
12018	4.079832	36	12068	4.081635	36	12118	4.083431	36
12019	4.079868	36	12069	4.081671	36	12119	4.083467	36
12020	4.079904	37	12070	4.081707	36	12120	4.083503	35
12021	4.079941	36	12071	4.081743	36	12121	4.083538	36
12022	4.079977	36	12072	4.081779	36	12122	4.083574	36
12023	4.080013	36	12073	4.081815	36	12123	4.083610	36
12024	4.080049	36	12074	4.081851	36	12124	4.083646	36
12025	4.080085	36	12075	4.081887	36	12125	4.083682	36
12026	4.080121	36	12076	4.081923	36	12126	4.083718	35
12027	4.080157	36	12077	4.081959	36	12127	4.083753	36
12028	4.080193	37	12078	4.081995	36	12128	4.083789	36
12029	4.080230	36	12079	4.082031	36	12129	4.083825	36
12030	4.080266	36	12080	4.082067	36	12130	4.083861	36
12031	4.080302	36	12081	4.082103	36	12131	4.083897	35
12032	4.080338	36	12082	4.082139	36	12132	4.083932	36
12033	4.080374	36	12083	4.082175	36	12133	4.083968	36
12034	4.080410	36	12084	4.082211	36	12134	4.084004	36
12035	4.080446	36	12085	4.082247	36	12135	4.084040	36
12036	4.080482	36	12086	4.082283	36	12136	4.084076	35
12037	4.080518	36	12087	4.082319	35	12137	4.084111	36
12038	4.080554	36	12088	4.082354	36	12138	4.084147	36
12039	4.080590	36	12089	4.082390	36	12139	4.084183	36
12040	4.080626	37	12090	4.082426	36	12140	4.084219	35
12041	4.080663	36	12091	4.082462	36	12141	4.084254	36
12042	4.080699	36	12092	4.082498	36	12142	4.084290	36
12043	4.080735	36	12093	4.082534	36	12143	4.084326	36
12044	4.080771	36	12094	4.082570	36	12144	4.084362	36
12045	4.080807	36	12095	4.082606	36	12145	4.084398	35
12046	4.080843	36	12096	4.082642	36	12146	4.084433	36
12047	4.080879	36	12097	4.082678	36	12147	4.084469	36
12048	4.080915	36	12098	4.082714	35	12148	4.084505	36
12049	4.080951	36	12099	4.082749	36	12149	4.084541	35
12050	4.080987	36	12100	4.082785	36	12150	4.084576	36

Nomb.	3. 22' 30"	D.	Nomb.	3. 23' 20"	D.	Nomb.	3. 24' 10"	D.
	Logarith.			Logarith.			Logarith.	
12150	4.084576	36	12200	4.086360	35	12250	4.088136	36
12151	4.084612	36	12201	4.086395	36	12251	4.088172	35
12152	4.084648	35	12202	4.086431	36	12252	4.088207	35
12153	4.084683	36	12203	4.086467	35	12253	4.088242	36
12154	4.084719	36	12204	4.086502	36	12254	4.088278	35
12155	4.084755	36	12205	4.086538	35	12255	4.088313	36
12156	4.084791	35	12206	4.086573	36	12256	4.088349	35
12157	4.084826	36	12207	4.086609	36	12257	4.088384	36
12158	4.084862	36	12208	4.086645	35	12258	4.088420	35
12159	4.084898	36	12209	4.086680	36	12259	4.088455	35
12160	4.084934	35	12210	4.086716	35	12260	4.088490	36
12161	4.084969	36	12211	4.086751	36	12261	4.088526	35
12162	4.085005	36	12212	4.086787	35	12262	4.088561	36
12163	4.085041	35	12213	4.086822	36	12263	4.088597	35
12164	4.085076	36	12214	4.086858	35	12264	4.088632	36
12165	4.085112	36	12215	4.086893	36	12265	4.088668	35
12166	4.085148	36	12216	4.086929	36	12266	4.088703	35
12167	4.085184	35	12217	4.086965	35	12267	4.088738	36
12168	4.085219	36	12218	4.087000	36	12268	4.088774	35
12169	4.085255	36	12219	4.087036	35	12269	4.088809	36
12170	4.085291	35	12220	4.087071	36	12270	4.088845	35
12171	4.085326	36	12221	4.087107	35	12271	4.088880	35
12172	4.085362	36	12222	4.087142	36	12272	4.088915	36
12173	4.085398	35	12223	4.087178	35	12273	4.088951	35
12174	4.085433	36	12224	4.087213	36	12274	4.088986	36
12175	4.085469	36	12225	4.087249	35	12275	4.089022	35
12176	4.085505	35	12226	4.087284	36	12276	4.089057	35
12177	4.085540	36	12227	4.087320	35	12277	4.089092	36
12178	4.085576	36	12228	4.087355	36	12278	4.089128	35
12179	4.085612	35	12229	4.087391	35	12279	4.089163	35
12180	4.085647	36	12230	4.087426	36	12280	4.089198	36
12181	4.085683	36	12231	4.087462	35	12281	4.089234	35
12182	4.085719	35	12232	4.087497	36	12282	4.089269	35
12183	4.085754	36	12233	4.087533	35	12283	4.089304	36
12184	4.085790	36	12234	4.087568	36	12284	4.089340	35
12185	4.085826	35	12235	4.087604	35	12285	4.089375	36
12186	4.085861	36	12236	4.087639	36	12286	4.089411	35
12187	4.085897	35	12237	4.087675	35	12287	4.089446	35
12188	4.085932	36	12238	4.087710	36	12288	4.089481	36
12189	4.085968	36	12239	4.087746	35	12289	4.089517	35
12190	4.086004	35	12240	4.087781	36	12290	4.089552	35
12191	4.086039	36	12241	4.087817	35	12291	4.089587	36
12192	4.086075	36	12242	4.087852	36	12292	4.089623	35
12193	4.086111	35	12243	4.087888	35	12293	4.089658	35
12194	4.086146	36	12244	4.087923	36	12294	4.089693	36
12195	4.086182	35	12245	4.087959	35	12295	4.089729	35
12196	4.086217	36	12246	4.087994	36	12296	4.089764	35
12197	4.086253	36	12247	4.088030	35	12297	4.089799	35
12198	4.086289	35	12248	4.088065	36	12298	4.089834	35
12199	4.086324	36	12249	4.088101	35	12299	4.089870	35
12200	4.086360		12250	4.088136		12300	4.089905	

Nomb.	3. 25' 0"	D.	Nomb.	3. 25' 50"	D.	Nomb.	3. 26' 40"	D.
	Logarith.			Logarith.			Logarith.	
12300	4.089905	35	12350	4.091667	35	12400	4.093422	35
12301	4.089940	36	12351	4.091702	35	12401	4.093457	35
12302	4.089976	35	12352	4.091737	35	12402	4.093492	35
12303	4.090011	35	12353	4.091772	36	12403	4.093527	35
12304	4.090046	36	12354	4.091808	35	12404	4.093562	35
12305	4.090082	35	12355	4.091843	35	12405	4.093597	35
12306	4.090117	35	12356	4.091878	35	12406	4.093632	35
12307	4.090152	35	12357	4.091913	35	12407	4.093667	35
12308	4.090187	36	12358	4.091948	35	12408	4.093702	35
12309	4.090223	35	12359	4.091983	35	12409	4.093737	35
12310	4.090258	35	12360	4.092018	36	12410	4.093772	35
12311	4.090293	36	12361	4.092054	35	12411	4.093807	35
12312	4.090329	35	12362	4.092089	35	12412	4.093842	35
12313	4.090364	35	12363	4.092124	35	12413	4.093877	35
12314	4.090399	35	12364	4.092159	35	12414	4.093912	35
12315	4.090434	36	12365	4.092194	35	12415	4.093947	35
12316	4.090470	35	12366	4.092229	35	12416	4.093982	35
12317	4.090505	35	12367	4.092264	35	12417	4.094017	35
12318	4.090540	35	12368	4.092299	36	12418	4.094052	35
12319	4.090575	36	12369	4.092335	35	12419	4.094087	35
12320	4.090611	35	12370	4.092370	35	12420	4.094122	35
12321	4.090646	35	12371	4.092405	35	12421	4.094157	35
12322	4.090681	35	12372	4.092440	35	12422	4.094192	34
12323	4.090716	36	12373	4.092475	35	12423	4.094226	35
12324	4.090752	35	12374	4.092510	35	12424	4.094261	35
12325	4.090787	35	12375	4.092545	35	12425	4.094296	35
12326	4.090822	35	12376	4.092580	35	12426	4.094331	35
12327	4.090857	36	12377	4.092615	35	12427	4.094366	35
12328	4.090893	35	12378	4.092650	36	12428	4.094401	35
12329	4.090928	35	12379	4.092686	35	12429	4.094436	35
12330	4.090963	35	12380	4.092721	35	12430	4.094471	35
12331	4.090998	36	12381	4.092756	35	12431	4.094506	35
12332	4.091034	35	12382	4.092791	35	12432	4.094541	35
12333	4.091069	35	12383	4.092826	35	12433	4.094576	35
12334	4.091104	35	12384	4.092861	35	12434	4.094611	35
12335	4.091139	35	12385	4.092896	35	12435	4.094646	35
12336	4.091174	36	12386	4.092931	35	12436	4.094681	35
12337	4.091210	35	12387	4.092966	35	12437	4.094716	35
12338	4.091245	35	12388	4.093001	35	12438	4.094751	34
12339	4.091280	35	12389	4.093036	35	12439	4.094785	35
12340	4.091315	35	12390	4.093071	36	12440	4.094820	35
12341	4.091350	36	12391	4.093106	35	12441	4.094855	35
12342	4.091386	35	12392	4.093141	35	12442	4.094890	35
12343	4.091421	35	12393	4.093176	35	12443	4.094925	35
12344	4.091456	35	12394	4.093211	36	12444	4.094960	35
12345	4.091491	35	12395	4.093247	35	12445	4.094995	35
12346	4.091526	35	12396	4.093282	35	12446	4.095030	35
12347	4.091561	36	12397	4.093317	35	12447	4.095065	35
12348	4.091597	35	12398	4.093352	35	12448	4.095100	34
12349	4.091632	35	12399	4.093387	35	12449	4.095134	35
12350	4.091667		12400	4.093422		12450	4.095169	35

Nomb.	3. 27' 30"	D.	Nomb.	3. 28' 20"	D.	Nomb.	3. 29' 10"	D.
	Logarith.			Logarith.			Logarith.	
12450	4.095169	35	12500	4.096910	35	12550	4.098644	34
12451	4.095204	35	12501	4.096945	34	12551	4.098678	35
12452	4.095239	35	12502	4.096979	35	12552	4.098713	35
12453	4.095274	35	12503	4.097014	35	12553	4.098748	34
12454	4.095309	35	12504	4.097049	35	12554	4.098782	35
12455	4.095344	35	12505	4.097084	34	12555	4.098817	34
12456	4.095379	34	12506	4.097118	35	12556	4.098851	35
12457	4.095413	35	12507	4.097153	35	12557	4.098886	34
12458	4.095448	35	12508	4.097188	35	12558	4.098920	35
12459	4.095483	35	12509	4.097223	35	12559	4.098955	35
12460	4.095518	35	12510	4.097257	34	12560	4.098990	34
12461	4.095553	35	12511	4.097292	35	12561	4.099024	35
12462	4.095588	35	12512	4.097327	34	12562	4.099059	34
12463	4.095623	34	12513	4.097361	35	12563	4.099093	35
12464	4.095657	35	12514	4.097396	35	12564	4.099128	34
12465	4.095692	35	12515	4.097431	35	12565	4.099162	35
12466	4.095727	35	12516	4.097466	34	12566	4.099197	35
12467	4.095762	35	12517	4.097500	35	12567	4.099232	34
12468	4.095797	35	12518	4.097535	35	12568	4.099266	35
12469	4.095832	34	12519	4.097570	34	12569	4.099301	34
12470	4.095866	35	12520	4.097604	35	12570	4.099335	35
12471	4.095901	35	12521	4.097639	35	12571	4.099370	34
12472	4.095936	35	12522	4.097674	34	12572	4.099404	35
12473	4.095971	35	12523	4.097708	35	12573	4.099439	34
12474	4.096006	35	12524	4.097743	35	12574	4.099473	35
12475	4.096041	34	12525	4.097778	34	12575	4.099508	35
12476	4.096075	35	12526	4.097812	35	12576	4.099543	34
12477	4.096110	35	12527	4.097847	35	12577	4.099577	35
12478	4.096145	35	12528	4.097882	34	12578	4.099612	34
12479	4.096180	35	12529	4.097916	35	12579	4.099646	35
12480	4.096215	34	12530	4.097951	35	12580	4.099681	34
12481	4.096249	35	12531	4.097986	34	12581	4.099715	35
12482	4.096284	35	12532	4.098020	35	12582	4.099750	34
12483	4.096319	35	12533	4.098055	35	12583	4.099784	35
12484	4.096354	35	12534	4.098090	34	12584	4.099819	34
12485	4.096389	34	12535	4.098124	35	12585	4.099853	35
12486	4.096423	35	12536	4.098159	35	12586	4.099888	34
12487	4.096458	35	12537	4.098194	34	12587	4.099922	35
12488	4.096493	35	12538	4.098228	35	12588	4.099957	34
12489	4.096528	34	12539	4.098263	35	12589	4.099991	35
12490	4.096562	35	12540	4.098298	34	12590	4.100026	34
12491	4.096597	35	12541	4.098332	35	12591	4.100060	35
12492	4.096632	35	12542	4.098367	34	12592	4.100095	34
12493	4.096667	35	12543	4.098401	35	12593	4.100129	35
12494	4.096702	34	12544	4.098436	35	12594	4.100164	34
12495	4.096736	35	12545	4.098471	34	12595	4.100198	35
12496	4.096771	35	12546	4.098505	35	12596	4.100233	34
12497	4.096806	35	12547	4.098540	35	12597	4.100267	35
12498	4.096841	34	12548	4.098575	34	12598	4.100302	34
12499	4.096875	35	12549	4.098609	35	12599	4.100336	35
12500	4.096910		12550	4.098644		12600	4.100371	

Nomb.	3. 30' 0"	D.	Nomb.	3. 30' 50"	D.	Nomb.	3. 31' 40"	D.
12600	4.100371		12650	4.102091		12700	4.103804	
12601	4.100405	34	12651	4.102125	34	12701	4.103838	34
12602	4.100440	35	12652	4.102159	34	12702	4.103872	34
12603	4.100474	34	12653	4.102194	35	12703	4.103906	34
12604	4.100508	34	12654	4.102228	35	12704	4.103941	35
12605	4.100543	35	12655	4.102262	34	12705	4.103975	34
12606	4.100577	34	12656	4.102297	35	12706	4.104009	34
12607	4.100612	35	12657	4.102331	34	12707	4.104043	34
12608	4.100646	34	12658	4.102365	34	12708	4.104077	34
12609	4.100681	35	12659	4.102399	34	12709	4.104111	35
12610	4.100715	34	12660	4.102434	35	12710	4.104146	34
12611	4.100750	34	12661	4.102468	34	12711	4.104180	34
12612	4.100784	34	12662	4.102502	34	12712	4.104214	34
12613	4.100818	35	12663	4.102537	35	12713	4.104248	34
12614	4.100853	35	12664	4.102571	34	12714	4.104282	34
12615	4.100887	34	12665	4.102605	34	12715	4.104316	35
12616	4.100922	35	12666	4.102640	35	12716	4.104351	34
12617	4.100956	34	12667	4.102674	34	12717	4.104385	34
12618	4.100991	35	12668	4.102708	34	12718	4.104419	34
12619	4.101025	34	12669	4.102742	35	12719	4.104453	34
12620	4.101059	34	12670	4.102777	34	12720	4.104487	34
12621	4.101094	35	12671	4.102811	34	12721	4.104521	34
12622	4.101128	34	12672	4.102845	34	12722	4.104555	35
12623	4.101163	35	12673	4.102879	34	12723	4.104590	34
12624	4.101197	34	12674	4.102914	35	12724	4.104624	34
12625	4.101231	34	12675	4.102948	34	12725	4.104658	34
12626	4.101266	35	12676	4.202982	35	12726	4.104692	34
12627	4.101300	34	12677	4.103017	34	12727	4.104726	34
12628	4.101335	35	12678	4.103051	34	12728	4.104760	34
12629	4.101369	34	12679	4.103085	34	12729	4.104794	34
12630	4.101403	35	12680	4.103119	35	12730	4.104828	35
12631	4.101438	34	12681	4.103154	34	12731	4.104863	34
12632	4.101472	35	12682	4.103188	34	12732	4.104897	34
12633	4.101507	34	12683	4.103222	34	12733	4.104931	34
12634	4.101541	34	12684	4.103256	35	12734	4.104965	34
12635	4.101575	35	12685	4.103291	34	12735	4.104999	34
12636	4.101610	34	12686	4.103325	34	12736	4.105033	34
12637	4.101644	34	12687	4.103359	34	12737	4.105067	34
12638	4.101678	35	12688	4.103393	34	12738	4.105101	34
12639	4.101713	34	12689	4.103427	35	12739	4.105135	34
12640	4.101747	34	12690	4.103462	34	12740	4.105169	35
12641	4.101781	35	12691	4.103496	34	12741	4.105204	34
12642	4.101816	34	12692	4.103530	34	12742	4.105238	34
12643	4.101850	35	12693	4.103564	35	12743	4.105272	34
12644	4.101885	34	12694	4.103599	34	12744	4.105306	34
12645	4.101919	34	12695	4.103633	34	12745	4.105340	34
12646	4.101953	35	12696	4.103667	34	12746	4.105374	34
12647	4.101988	34	12697	4.103701	34	12747	4.105408	34
12648	4.102022	35	12698	4.103735	35	12748	4.105442	34
12649	4.102056	34	12699	4.103770	34	12749	4.105476	34
12650	4.102091	35	12700	4.103804	34	12750	4.105510	34

Nomb.	3. 32' 30"	D.	Nomb.	3. 33' 26"	D.	Nomb.	3. 34' 10"	D.
	Logarith.			Logarith.			Logarith.	
12750	4.105510	34	12800	4.107210	34	12850	4.108903	34
12751	4.105544	34	12801	4.107244	34	12851	4.108937	34
12752	4.105578	34	12802	4.107278	34	12852	4.108971	34
12753	4.105612	34	12803	4.107312	34	12853	4.109005	34
12754	4.105646	34	12804	4.107346	34	12854	4.109038	34
		35			34			34
12755	4.105681	34	12805	4.107380	33	12855	4.109072	34
12756	4.105715	34	12806	4.107413	34	12856	4.109106	34
12757	4.105749	34	12807	4.107447	34	12857	4.109140	33
12758	4.105783	34	12808	4.107481	34	12858	4.109173	34
12759	4.105817	34	12809	4.107515	34	12859	4.109207	34
		34			34			34
12760	4.105851	34	12810	4.107549	34	12860	4.109241	34
12761	4.105885	34	12811	4.107583	34	12861	4.109275	34
12762	4.105919	34	12812	4.107617	34	12862	4.109309	33
12763	4.105953	34	12813	4.107651	34	12863	4.109342	34
12764	4.105987	34	12814	4.107685	34	12864	4.109376	34
		34			34			34
12765	4.106021	34	12815	4.107719	33	12865	4.109410	34
12766	4.106055	34	12816	4.107752	34	12866	4.109444	33
12767	4.106089	34	12817	4.107786	34	12867	4.109477	34
12768	4.106123	34	12818	4.107820	34	12868	4.109511	34
12769	4.106157	34	12819	4.107854	34	12869	4.109545	34
		34			34			34
12770	4.106191	34	12820	4.107888	34	12870	4.109579	33
12771	4.106225	34	12821	4.107922	34	12871	4.109612	34
12772	4.106259	34	12822	4.107956	34	12872	4.109646	34
12773	4.106293	34	12823	4.107990	34	12873	4.109680	34
12774	4.106327	34	12824	4.108024	33	12874	4.109714	33
		34			33			33
12775	4.106361	34	12825	4.108057	34	12875	4.109747	34
12776	4.106395	34	12826	4.108091	34	12876	4.109781	34
12777	4.106429	34	12827	4.108125	34	12877	4.109815	33
12778	4.106463	34	12828	4.108159	34	12878	4.109848	34
12779	4.106497	34	12829	4.108193	34	12879	4.109882	34
		34			34			34
12780	4.106531	34	12830	4.108227	34	12880	4.109916	34
12781	4.106565	34	12831	4.108261	33	12881	4.109950	33
12782	4.106599	34	12832	4.108294	34	12882	4.109983	34
12783	4.106633	34	12833	4.108328	34	12883	4.110017	34
12784	4.106667	34	12834	4.108362	34	12884	4.110051	33
		34			34			33
12785	4.106701	34	12835	4.108396	34	12885	4.110084	34
12786	4.106735	34	12836	4.108430	34	12886	4.110118	34
12787	4.106769	34	12837	4.108464	33	12887	4.110152	34
12788	4.106803	34	12838	4.108497	34	12888	4.110186	33
12789	4.106837	34	12839	4.108531	34	12889	4.110219	34
		34			34			34
12790	4.106871	34	12840	4.108565	34	12890	4.110253	34
12791	4.106905	34	12841	4.108599	34	12891	4.110287	33
12792	4.106939	33	12842	4.108633	33	12892	4.110320	34
12793	4.106972	34	12843	4.108666	34	12893	4.110354	34
12794	4.107006	34	12844	4.108700	34	12894	4.110388	33
		34			34			33
12795	4.107040	34	12845	4.108734	34	12895	4.110421	34
12796	4.107074	34	12846	4.108768	34	12896	4.110455	34
12797	4.107108	34	12847	4.108802	34	12897	4.110489	33
12798	4.107142	34	12848	4.108836	33	12898	4.110522	34
12799	4.107176	34	12849	4.108869	34	12899	4.110556	34
12800	4.107210	34	12850	4.108903	34	12900	4.110590	34

Nomb.	3. 35' 0"	D.	Nomb.	3. 35' 50"	D.	Nomb.	3. 36' 40"	D.
Logarith.			Logarith.			Logarith.		
12900	4.110590	33	12950	4.112270	33	13000	4.113943	34
12901	4.110623	34	12951	4.112303	34	13001	4.113977	33
12902	4.110657	34	12952	4.112337	34	13002	4.114010	34
12903	4.110691	33	12953	4.112370	33	13003	4.114044	33
12904	4.110724	34	12954	4.112404	34	13004	4.114077	33
12905	4.110758	34	12955	4.112437	34	13005	4.114110	34
12906	4.110792	33	12956	4.112471	34	13006	4.114144	33
12907	4.110825	34	12957	4.112505	33	13007	4.114177	34
12908	4.110859	34	12958	4.112538	34	13008	4.114211	33
12909	4.110893	33	12959	4.112572	33	13009	4.114244	33
12910	4.110926	34	12960	4.112605	34	13010	4.114277	34
12911	4.110960	34	12961	4.112639	33	13011	4.114311	33
12912	4.110994	33	12962	4.112672	34	13012	4.114344	33
12913	4.111027	34	12963	4.112706	33	13013	4.114377	34
12914	4.111061	33	12964	4.112739	34	13014	4.114411	33
12915	4.111094	34	12965	4.112773	33	13015	4.114444	34
12916	4.111128	34	12966	4.112806	34	13016	4.114478	33
12917	4.111162	33	12967	4.112840	33	13017	4.114511	33
12918	4.111195	34	12968	4.112873	34	13018	4.114544	34
12919	4.111229	34	12969	4.112907	33	13019	4.114578	33
12920	4.111263	33	12970	4.112940	34	13020	4.114611	33
12921	4.111296	34	12971	4.112974	33	13021	4.114644	34
12922	4.111330	33	12972	4.113007	33	13022	4.114678	33
12923	4.111363	34	12973	4.113040	34	13023	4.114711	33
12924	4.111397	34	12974	4.113074	33	13024	4.114744	34
12925	4.111431	33	12975	4.113107	34	13025	4.114778	33
12926	4.111464	34	12976	4.113141	33	13026	4.114811	33
12927	4.111498	33	12977	4.113174	34	13027	4.114844	34
12928	4.111531	34	12978	4.113208	33	13028	4.114878	33
12929	4.111565	34	12979	4.113241	34	13029	4.114911	33
12930	4.111599	33	12980	4.113275	33	13030	4.114944	34
12931	4.111632	34	12981	4.113308	34	13031	4.114978	33
12932	4.111666	33	12982	4.113342	33	13032	4.115011	33
12933	4.111699	34	12983	4.113375	34	13033	4.115044	34
12934	4.111733	33	12984	4.113409	33	13034	4.115078	33
12935	4.111766	34	12985	4.113442	33	13035	4.115111	33
12936	4.111800	34	12986	4.113475	34	13036	4.115144	34
12937	4.111834	33	12987	4.113509	33	13037	4.115178	33
12938	4.111867	34	12988	4.113542	34	13038	4.115211	33
12939	4.111901	33	12989	4.113576	33	13039	4.115244	34
12940	4.111934	34	12990	4.113609	34	13040	4.115278	33
12941	4.111968	33	12991	4.113643	33	13041	4.115311	33
12942	4.112001	34	12992	4.113676	33	13042	4.115344	34
12943	4.112035	34	12993	4.113709	34	13043	4.115378	33
12944	4.112069	33	12994	4.113743	33	13044	4.115411	33
12945	4.112102	34	12995	4.113776	34	13045	4.115444	33
12946	4.112136	33	12996	4.113810	33	13046	4.115477	34
12947	4.112169	34	12997	4.113843	34	13047	4.115511	33
12948	4.112203	33	12998	4.113877	33	13048	4.115544	33
12949	4.112236	34	12999	4.113910	33	13049	4.115577	34
12950	4.112270		13000	4.113943		13050	4.115611	

Nomb.	3. 37' 30"	D.	Nomb.	3. 38' 20"	D.	Nomb.	3. 39' 10"	D.
13050	4.115611	33	13100	4.117271	33	13150	4.118926	33
13051	4.115644	33	13101	4.117304	33	13151	4.118959	33
13052	4.115677	33	13102	4.117338	34	13152	4.118992	33
13053	4.115710	33	13103	4.117371	33	13153	4.119025	33
13054	4.115744	34	13104	4.117404	33	13154	4.119058	33
13055	4.115777	33	13105	4.117437	33	13155	4.119091	33
13056	4.115810	33	13106	4.117470	33	13156	4.119124	33
13057	4.115843	33	13107	4.117503	33	13157	4.119157	33
13058	4.115877	34	13108	4.117536	33	13158	4.119190	33
13059	4.115910	33	13109	4.117570	34	13159	4.119223	33
13060	4.115943	33	13110	4.117603	33	13160	4.119256	33
13061	4.115976	33	13111	4.117636	33	13161	4.119289	33
13062	4.116010	34	13112	4.117669	33	13162	4.119322	33
13063	4.116043	33	13113	4.117702	33	13163	4.119355	33
13064	4.116076	33	13114	4.117735	33	13164	4.119388	33
13065	4.116109	33	13115	4.117768	33	13165	4.119421	33
13066	4.116143	34	13116	4.117801	33	13166	4.119454	33
13067	4.116176	33	13117	4.117835	34	13167	4.119487	33
13068	4.116209	33	13118	4.117868	33	13168	4.119520	33
13069	4.116242	33	13119	4.117901	33	13169	4.119553	33
13070	4.116276	34	13120	4.117934	33	13170	4.119586	33
13071	4.116309	33	13121	4.117967	33	13171	4.119619	33
13072	4.116342	33	13122	4.118000	33	13172	4.119652	33
13073	4.116375	33	13123	4.118033	33	13173	4.119685	33
13074	4.116409	34	13124	4.118066	33	13174	4.119718	33
13075	4.116442	33	13125	4.118099	33	13175	4.119751	33
13076	4.116475	33	13126	4.118132	33	13176	4.119784	33
13077	4.116508	33	13127	4.118166	34	13177	4.119817	33
13078	4.116541	33	13128	4.118199	33	13178	4.119850	33
13079	4.116575	34	13129	4.118232	33	13179	4.119883	33
13080	4.116608	33	13130	4.118265	33	13180	4.119915	33
13081	4.116641	33	13131	4.118298	33	13181	4.119948	33
13082	4.116674	33	13132	4.118331	33	13182	4.119981	33
13083	4.116707	33	13133	4.118364	33	13183	4.120014	33
13084	4.116741	34	13134	4.118397	33	13184	4.120047	33
13085	4.116774	33	13135	4.118430	33	13185	4.120080	33
13086	4.116807	33	13136	4.118463	33	13186	4.120113	33
13087	4.116840	33	13137	4.118496	33	13187	4.120146	33
13088	4.116873	33	13138	4.118529	33	13188	4.120179	33
13089	4.116907	34	13139	4.118562	33	13189	4.120212	33
13090	4.116940	33	13140	4.118595	33	13190	4.120245	33
13091	4.116973	33	13141	4.118628	33	13191	4.120278	33
13092	4.117006	33	13142	4.118662	34	13192	4.120311	33
13093	4.117039	33	13143	4.118695	33	13193	4.120344	33
13094	4.117072	33	13144	4.118728	33	13194	4.120377	33
13095	4.117106	34	13145	4.118761	33	13195	4.120409	33
13096	4.117139	33	13146	4.118794	33	13196	4.120442	33
13097	4.117172	33	13147	4.118827	33	13197	4.120475	33
13098	4.117205	33	13148	4.118860	33	13198	4.120508	33
13099	4.117238	33	13149	4.118893	33	13199	4.120541	33
13100	4.117271	33	13150	4.118926	33	13200	4.120574	33

Nomb.	3. 40' 0"	D.	Nomb.	3. 40' 50"	D.	Nomb.	3. 41' 40"	D.
	Logarith.			Logarith.			Logarith.	
13200	4.120574	33	13250	4.122216	33	13300	4.123852	32
13201	4.120607	33	13251	4.122249	32	13301	4.123884	33
13202	4.120640	33	13252	4.122281	33	13302	4.123917	33
13203	4.120673	33	13253	4.122314	33	13303	4.123950	32
13204	4.120706	32	13254	4.122347	33	13304	4.123982	33
13205	4.120738	33	13255	4.122380	32	13305	4.124015	33
13206	4.120771	33	13256	4.122412	33	13306	4.124048	32
13207	4.120804	33	13257	4.122445	33	13307	4.124080	33
13208	4.120837	33	13258	4.122478	33	13308	4.124113	32
13209	4.120870	33	13259	4.122511	33	13309	4.124145	33
13210	4.120903	33	13260	4.122544	32	13310	4.124178	33
13211	4.120936	33	13261	4.122576	33	13311	4.124211	32
13212	4.120969	32	13262	4.122609	33	13312	4.124243	33
13213	4.121001	33	13263	4.122642	33	13313	4.124276	33
13214	4.121034	33	13264	4.122675	32	13314	4.124309	32
13215	4.121067	33	13265	4.122707	33	13315	4.124341	33
13216	4.121100	33	13266	4.122740	33	13316	4.124374	32
13217	4.121133	33	13267	4.122773	32	13317	4.124406	33
13218	4.121166	33	13268	4.122805	33	13318	4.124439	33
13219	4.121199	32	13269	4.122838	33	13319	4.124472	32
13220	4.121231	33	13270	4.122871	33	13320	4.124504	33
13221	4.121264	33	13271	4.122904	32	13321	4.124537	32
13222	4.121297	33	13272	4.122936	33	13322	4.124569	33
13223	4.121330	33	13273	4.122969	33	13323	4.124602	33
13224	4.121363	33	13274	4.123002	33	13324	4.124635	32
13225	4.121396	33	13275	4.123035	32	13325	4.124667	33
13226	4.121429	32	13276	4.123067	33	13326	4.124700	33
13227	4.121461	33	13277	4.123100	33	13327	4.124732	33
13228	4.121494	33	13278	4.123133	32	13328	4.124765	33
13229	4.121527	33	13279	4.123165	33	13329	4.124798	32
13230	4.121560	33	13280	4.123198	33	13330	4.124830	33
13231	4.121593	32	13281	4.123231	32	13331	4.124863	32
13232	4.121625	33	13282	4.123263	33	13332	4.124895	33
13233	4.121658	33	13283	4.123296	33	13333	4.124928	32
13234	4.121691	33	13284	4.123329	33	13334	4.124960	33
13235	4.121724	33	13285	4.123362	32	13335	4.124993	33
13236	4.121757	33	13286	4.123394	33	13336	4.125026	32
13237	4.121790	32	13287	4.123427	33	13337	4.125058	33
13238	4.121822	33	13288	4.123460	32	13338	4.125091	32
13239	4.121855	33	13289	4.123492	33	13339	4.125123	33
13240	4.121888	33	13290	4.123525	33	13340	4.125156	32
13241	4.121921	33	13291	4.123558	32	13341	4.125188	33
13242	4.121954	32	13292	4.123590	33	13342	4.125221	32
13243	4.121986	33	13293	4.123623	33	13343	4.125253	33
13244	4.122019	33	13294	4.123656	32	13344	4.125286	33
13245	4.122052	33	13295	4.123688	33	13345	4.125319	32
13246	4.122085	33	13296	4.123721	33	13346	4.125351	33
13247	4.122118	32	13297	4.123754	32	13347	4.125384	32
13248	4.122150	33	13298	4.123786	33	13348	4.125416	33
13249	4.122183	33	13299	4.123819	33	13349	4.125449	32
13250	4.122216	33	13300	4.123852	33	13350	4.125481	32

Nomb.	3. 42' 30"	D.	Nomb.	3. 43' 20"	D.	Nomb.	3. 44' 10"	D.
	Logarith.			Logarith.			Logarith.	
13350	4.125481	33	13400	4.127105	32	13450	4.128722	33
13351	4.125514	32	13401	4.127137	33	13451	4.128755	32
13352	4.125546	33	13402	4.127170	32	13452	4.128787	32
13353	4.125579	32	13403	4.127202	32	13453	4.128819	32
13354	4.125611	33	13404	4.127234	33	13454	4.128851	33
13355	4.125644	32	13405	4.127267	32	13455	4.128884	32
13356	4.125676	33	13406	4.127299	33	13456	4.128916	32
13357	4.125709	32	13407	4.127332	32	13457	4.128948	33
13358	4.125741	33	13408	4.127364	32	13458	4.128981	32
13359	4.125774	33	13409	4.127396	33	13459	4.129013	32
13360	4.125807	32	13410	4.127429	32	13460	4.129045	32
13361	4.125839	33	13411	4.127461	33	13461	4.129077	32
13362	4.125872	32	13412	4.127494	32	13462	4.129110	33
13363	4.125904	33	13413	4.127526	32	13463	4.129142	32
13364	4.125937	32	13414	4.127558	33	13464	4.129174	32
13365	4.125969	33	13415	4.127591	32	13465	4.129206	33
13366	4.126002	32	13416	4.127623	32	13466	4.129239	32
13367	4.126034	32	13417	4.127655	33	13467	4.129271	32
13368	4.126066	33	13418	4.127688	32	13468	4.129303	32
13369	4.126099	32	13419	4.127720	33	13469	4.129335	33
13370	4.126131	33	13420	4.127753	32	13470	4.129368	32
13371	4.126164	32	13421	4.127785	32	13471	4.129400	32
13372	4.126196	33	13422	4.127817	33	13472	4.129432	32
13373	4.126229	32	13423	4.127850	32	13473	4.129464	33
13374	4.126261	33	13424	4.127882	32	13474	4.129497	32
13375	4.126294	32	13425	4.127914	33	13475	4.129529	32
13376	4.126326	33	13426	4.127947	32	13476	4.129561	32
13377	4.126359	32	13427	4.127979	32	13477	4.129593	33
13378	4.126391	33	13428	4.128011	32	13478	4.129626	32
13379	4.126424	32	13429	4.128044	32	13479	4.129658	32
13380	4.126456	33	13430	4.128076	32	13480	4.129690	32
13381	4.126489	32	13431	4.128108	33	13481	4.129722	32
13382	4.126521	33	13432	4.128141	32	13482	4.129754	33
13383	4.126554	32	13433	4.128173	32	13483	4.129787	32
13384	4.126586	32	13434	4.128205	33	13484	4.129819	32
13385	4.126618	33	13435	4.128238	32	13485	4.129851	32
13386	4.126651	32	13436	4.128270	32	13486	4.129883	32
13387	4.126683	33	13437	4.128302	33	13487	4.129915	33
13388	4.126716	32	13438	4.128335	32	13488	4.129948	32
13389	4.126748	33	13439	4.128367	32	13489	4.129980	32
13390	4.126781	32	13440	4.128399	33	13490	4.130012	32
13391	4.126813	32	13441	4.128432	32	13491	4.130044	32
13392	4.126845	33	13442	4.128464	32	13492	4.130076	33
13393	4.126878	32	13443	4.128496	33	13493	4.130109	32
13394	4.126910	33	13444	4.128529	32	13494	4.130141	32
13395	4.126943	32	13445	4.128561	32	13495	4.130173	32
13396	4.126975	33	13446	4.128593	32	13496	4.130205	32
13397	4.127008	32	13447	4.128625	33	13497	4.130237	32
13398	4.127040	32	13448	4.128658	32	13498	4.130269	33
13399	4.127072	33	13449	4.128690	32	13499	4.130302	32
13400	4.127105	33	13450	4.128722	32	13500	4.130334	32

Nomb.	3. 45' 0"	D.	Nomb.	3. 45' 50"	D.	Nomb.	3. 46' 40"	D.
	Logarith.			Logarith.			Logarith.	
13500	4.130334	32	13550	4.131939	32	13600	4.133539	32
13501	4.130366	32	13551	4.131971	32	13601	4.133571	32
13502	4.130398	32	13552	4.132003	32	13602	4.133603	32
13503	4.130430	32	13553	4.132035	32	13603	4.133635	32
13504	4.130462	33	13554	4.132067	33	13604	4.133667	32
13505	4.130495	32	13555	4.132100	32	13605	4.133699	31
13506	4.130527	32	13556	4.132132	32	13606	4.133730	32
13507	4.130559	32	13557	4.132164	32	13607	4.133762	32
13508	4.130591	32	13558	4.132196	32	13608	4.133794	32
13509	4.130623	32	13559	4.132228	32	13609	4.133826	32
13510	4.130655	33	13560	4.132260	32	13610	4.133858	32
13511	4.130688	32	13561	4.132292	32	13611	4.133890	32
13512	4.130720	32	13562	4.132324	32	13612	4.133922	32
13513	4.130752	32	13563	4.132356	32	13613	4.133954	32
13514	4.130784	32	13564	4.132388	32	13614	4.133986	32
13515	4.130816	32	13565	4.132420	32	13615	4.134018	32
13516	4.130848	32	13566	4.132452	32	13616	4.134050	31
13517	4.130880	32	13567	4.132484	32	13617	4.134081	32
13518	4.130912	33	13568	4.132516	32	13618	4.134113	32
13519	4.130945	32	13569	4.132548	32	13619	4.134145	32
13520	4.130977	32	13570	4.132580	32	13620	4.134177	32
13521	4.131009	32	13571	4.132612	32	13621	4.134209	32
13522	4.131041	32	13572	4.132644	32	13622	4.134241	32
13523	4.131073	32	13573	4.132676	32	13623	4.134273	32
13524	4.131105	32	13574	4.132708	32	13624	4.134305	32
13525	4.131137	32	13575	4.132740	32	13625	4.134337	31
13526	4.131169	33	13576	4.132772	32	13626	4.134368	32
13527	4.131202	32	13577	4.132804	32	13627	4.134400	32
13528	4.131234	32	13578	4.132836	32	13628	4.134432	32
13529	4.131266	32	13579	4.132868	32	13629	4.134464	32
13530	4.131298	32	13580	4.132900	32	13630	4.134496	32
13531	4.131330	32	13581	4.132932	32	13631	4.134528	32
13532	4.131362	32	13582	4.132964	32	13632	4.134560	31
13533	4.131394	32	13583	4.132996	32	13633	4.134591	32
13534	4.131426	32	13584	4.133028	32	13634	4.134623	32
13535	4.131458	32	13585	4.133060	32	13635	4.134655	32
13536	4.131490	32	13586	4.133092	32	13636	4.134687	32
13537	4.131522	33	13587	4.133124	32	13637	4.134719	32
13538	4.131555	32	13588	4.133156	31	13638	4.134751	32
13539	4.131587	32	13589	4.133187	32	13639	4.134783	31
13540	4.131619	32	13590	4.133219	32	13640	4.134814	32
13541	4.131651	32	13591	4.133251	32	13641	4.134846	32
13542	4.131683	32	13592	4.133283	32	13642	4.134878	32
13543	4.131715	32	13593	4.133315	32	13643	4.134910	32
13544	4.131747	32	13594	4.133347	32	13644	4.134942	32
13545	4.131779	32	13595	4.133379	32	13645	4.134974	31
13546	4.131811	32	13596	4.133411	32	13646	4.135005	32
13547	4.131843	32	13597	4.133443	32	13647	4.135037	32
13548	4.131875	32	13598	4.133475	32	13648	4.135069	32
13549	4.131907	32	13599	4.133507	32	13649	4.135101	32
13550	4.131939	32	13600	4.133539	32	13650	4.135133	32

Nomb.	3. 47' 30"	D.	Nomb.	3. 48' 20"	D.	Nomb.	3. 49' 10"	D.
	Logarith.			Logarith.			Logarith.	
13650	4.135133	31	13700	4.136721	31	13750	4.138303	31
13651	4.135164	32	13701	4.136752	32	13751	4.138334	32
13652	4.135196	32	13702	4.136784	32	13752	4.138366	32
13653	4.135228	32	13703	4.136816	32	13753	4.138397	31
13654	4.135260	32	13704	4.136847	31	13754	4.138429	32
13655	4.135292	32	13705	4.136879	32	13755	4.138461	32
13656	4.135324	32	13706	4.136911	32	13756	4.138492	31
13657	4.135355	31	13707	4.136942	31	13757	4.138524	32
13658	4.135387	32	13708	4.136974	32	13758	4.138555	31
13659	4.135419	32	13709	4.137006	32	13759	4.138587	32
13660	4.135451	32	13710	4.137037	31	13760	4.138618	31
13661	4.135482	31	13711	4.137069	32	13761	4.138650	32
13662	4.135514	32	13712	4.137101	32	13762	4.138682	32
13663	4.135546	32	13713	4.137132	31	13763	4.138713	31
13664	4.135578	32	13714	4.137164	32	13764	4.138745	32
13665	4.135610	32	13715	4.137196	31	13765	4.138776	31
13666	4.135641	31	13716	4.137227	32	13766	4.138808	32
13667	4.135673	32	13717	4.137259	32	13767	4.138839	31
13668	4.135705	32	13718	4.137291	32	13768	4.138871	32
13669	4.135737	32	13719	4.137322	31	13769	4.138902	31
13670	4.135769	32	13720	4.137354	32	13770	4.138934	32
13671	4.135800	31	13721	4.137386	31	13771	4.138965	31
13672	4.135832	32	13722	4.137417	32	13772	4.138997	32
13673	4.135864	32	13723	4.137449	32	13773	4.139029	32
13674	4.135896	32	13724	4.137481	31	13774	4.139060	31
13675	4.135927	31	13725	4.137512	32	13775	4.139092	32
13676	4.135959	32	13726	4.137544	32	13776	4.139123	31
13677	4.135991	32	13727	4.137576	32	13777	4.139155	32
13678	4.136023	32	13728	4.137607	31	13778	4.139186	31
13679	4.136054	31	13729	4.137639	32	13779	4.139218	32
13680	4.136086	32	13730	4.137671	32	13780	4.139249	31
13681	4.136118	32	13731	4.137702	31	13781	4.139281	32
13682	4.136150	32	13732	4.137734	32	13782	4.139312	31
13683	4.136181	31	13733	4.137765	32	13783	4.139344	32
13684	4.136213	32	13734	4.137797	31	13784	4.139375	31
13685	4.136245	32	13735	4.137829	32	13785	4.139407	32
13686	4.136277	32	13736	4.137860	31	13786	4.139438	31
13687	4.136308	31	13737	4.137892	32	13787	4.139470	32
13688	4.136340	32	13738	4.137924	32	13788	4.139501	31
13689	4.136372	32	13739	4.137955	31	13789	4.139533	32
13690	4.136403	31	13740	4.137987	32	13790	4.139564	31
13691	4.136435	32	13741	4.138018	31	13791	4.139596	32
13692	4.136467	32	13742	4.138050	32	13792	4.139627	31
13693	4.136499	32	13743	4.138082	32	13793	4.139659	32
13694	4.136530	31	13744	4.138113	31	13794	4.139690	31
13695	4.136562	32	13745	4.138145	32	13795	4.139722	32
13696	4.136594	32	13746	4.138176	31	13796	4.139753	31
13697	4.136625	31	13747	4.138208	32	13797	4.139785	32
13698	4.136657	32	13748	4.138240	32	13798	4.139816	31
13699	4.136689	32	13749	4.138271	31	13799	4.139848	32
13700	4.136721	32	13750	4.138303	32	13800	4.139879	31

Nomb.	3. 50' 0"	D.	Nomb.	3. 50' 50"	D.	Nomb.	3. 51' 40"	D.
	Logarith.			Logarith.			Logarith.	
13800	4.139879	32	13850	4.141450	31	13900	4.143015	31
13801	4.139911	31	13851	4.141481	31	13901	4.143046	31
13802	4.139942	31	13852	4.141512	31	13902	4.143077	31
13803	4.139973	31	13853	4.141544	32	13903	4.143109	32
13804	4.140005	32	13854	4.141575	31	13904	4.143140	31
13805	4.140036	31	13855	4.141607	32	13905	4.143171	31
13806	4.140068	32	13856	4.141638	31	13906	4.143202	31
13807	4.140099	31	13857	4.141669	31	13907	4.143233	31
13808	4.140131	32	13858	4.141701	32	13908	4.143265	32
13809	4.140162	31	13859	4.141732	31	13909	4.143296	31
13810	4.140194	32	13860	4.141763	31	13910	4.143327	31
13811	4.140225	31	13861	4.141795	32	13911	4.143358	31
13812	4.140257	32	13862	4.141826	31	13912	4.143390	32
13813	4.140288	31	13863	4.141857	31	13913	4.143421	31
13814	4.140319	32	13864	4.141889	32	13914	4.143452	31
13815	4.140351	31	13865	4.141920	31	13915	4.143483	31
13816	4.140382	32	13866	4.141951	31	13916	4.143514	31
13817	4.140414	32	13867	4.141983	32	13917	4.143546	32
13818	4.140445	31	13868	4.142014	31	13918	4.143577	31
13819	4.140477	32	13869	4.142045	31	13919	4.173608	31
13820	4.140508	31	13870	4.142076	31	13920	4.143639	31
13821	4.140539	32	13871	4.142108	32	13921	4.143670	32
13822	4.140571	31	13872	4.142139	31	13922	4.143702	31
13823	4.140602	32	13873	4.142170	31	13923	4.143733	31
13824	4.140634	31	13874	4.142202	32	13924	4.143764	31
13825	4.140665	32	13875	4.142233	31	13925	4.143795	31
13826	4.140697	31	13876	4.142264	31	13926	4.143826	32
13827	4.140728	31	13877	4.142296	32	13927	4.143858	31
13828	4.140759	32	13878	4.142327	31	13928	4.143889	31
13829	4.140791	31	13879	4.142358	31	13929	4.143920	31
13830	4.140822	32	13880	4.142389	31	13930	4.143951	31
13831	4.140854	31	13881	4.142421	32	13931	4.143982	31
13832	4.140885	31	13882	4.142452	31	13932	4.144013	32
13833	4.140916	32	13883	4.142483	31	13933	4.144045	31
13834	4.140948	31	13884	4.142515	32	13934	4.144076	31
13835	4.140979	32	13885	4.142546	31	13935	4.144107	31
13836	4.141011	31	13886	4.142577	31	13936	4.144138	31
13837	4.141042	31	13887	4.142608	32	13937	4.144169	31
13838	4.141073	32	13888	4.142640	31	13938	4.144200	32
13839	4.141105	31	13889	4.142671	31	13939	4.144232	31
13840	4.141136	32	13890	4.142702	32	13940	4.144263	31
13841	4.141167	31	13891	4.142734	31	13941	4.144294	31
13842	4.141199	31	13892	4.142765	31	13942	4.144325	31
13843	4.141230	32	13893	4.142796	31	13943	4.144356	31
13844	4.141262	31	13894	4.142827	32	13944	4.144387	32
13845	4.141293	31	13895	4.142859	31	13945	4.144419	31
13846	4.141324	32	13896	4.142890	31	13946	4.144450	31
13847	4.141356	31	13897	4.142921	31	13947	4.144481	31
13848	4.141387	31	13898	4.142952	32	13948	4.144512	31
13849	4.141418	32	13899	4.142984	31	13949	4.144543	31
13850	4.141450		13900	4.143015		13950	4.144574	

Nomb.	3. 52' 30"	D.	Nomb.	3. 53' 20"	D.	Nomb.	3. 54' 10"	D.
	Logarith.			Logarith.			Logarith.	
13950	4.144574	31	14000	4.146128	31	14050	4.147676	31
13951	4.144605	31	14001	4.146159	31	14051	4.147707	31
13952	4.144636	31	14002	4.146190	31	14052	4.147738	31
13953	4.144668	32	14003	4.146221	31	14053	4.147769	31
13954	4.144699	31	14004	4.146252	31	14054	4.147800	31
13955	4.144730	31	14005	4.146283	31	14055	4.147831	31
13956	4.144761	31	14006	4.146314	31	14056	4.147862	31
13957	4.144792	31	14007	4.146345	31	14057	4.147893	31
13958	4.144823	31	14008	4.146376	31	14058	4.147924	30
13959	4.144854	31	14009	4.146407	31	14059	4.147955	31
13960	4.144885	32	14010	4.146438	31	14060	4.147985	31
13961	4.144917	31	14011	4.146469	31	14061	4.148016	31
13962	4.144948	31	14012	4.146500	31	14062	4.148047	31
13963	4.144979	31	14013	4.146531	31	14063	4.148078	31
13964	4.145010	31	14014	4.146562	31	14064	4.148109	31
13965	4.145041	31	14015	4.146593	31	14065	4.148140	31
13966	4.145072	31	14016	4.146624	31	14066	4.148171	30
13967	4.145103	31	14017	4.146655	31	14067	4.148201	31
13968	4.145134	31	14018	4.146686	31	14068	4.148232	31
13969	4.145165	31	14019	4.146717	31	14069	4.148263	31
13970	4.145196	31	14020	4.146748	31	14070	4.148294	31
13971	4.145227	32	14021	4.146779	31	14071	4.148325	31
13972	4.145259	31	14022	4.146810	31	14072	4.148356	31
13973	4.145290	31	14023	4.146841	31	14073	4.148387	31
13974	4.145321	31	14024	4.146872	31	14074	4.148418	30
13975	4.145352	31	14025	4.146903	31	14075	4.148448	31
13976	4.145383	31	14026	4.146934	31	14076	4.148479	31
13977	4.145414	31	14027	4.146965	31	14077	4.148510	31
13978	4.145445	31	14028	4.146996	31	14078	4.148541	31
13979	4.145476	31	14029	4.147027	31	14079	4.148572	31
13980	4.145507	31	14030	4.147058	31	14080	4.148603	30
13981	4.145538	31	14031	4.147089	31	14081	4.148633	31
13982	4.145569	31	14032	4.147120	31	14082	4.148664	31
13983	4.145600	31	14033	4.147151	30	14083	4.148695	31
13984	4.145631	31	14034	4.147181	31	14084	4.148726	31
13985	4.145662	32	14035	4.147212	31	14085	4.148757	31
13986	4.145694	31	14036	4.147243	31	14086	4.148788	31
13987	4.145725	31	14037	4.147274	31	14087	4.148819	30
13988	4.145756	31	14038	4.147305	31	14088	4.148849	31
13989	4.145787	31	14039	4.147336	31	14089	4.148880	31
13990	4.145818	31	14040	4.147367	31	14090	4.148911	31
13991	4.145849	31	14041	4.147398	31	14091	4.148942	31
13992	4.145880	31	14042	4.147429	31	14092	4.148973	30
13993	4.145911	31	14043	4.147460	31	14093	4.149003	31
13994	4.145942	31	14044	4.147491	31	14094	4.149034	31
13995	4.145973	31	14045	4.147522	31	14095	4.149065	31
13996	4.146004	31	14046	4.147553	31	14096	4.149096	31
13997	4.146035	31	14047	4.147584	30	14097	4.149127	31
13998	4.146066	31	14048	4.147614	30	14098	4.149158	30
13999	4.146097	31	14049	4.147645	31	14099	4.149188	31
14000	4.146128		14050	4.147676		14100	4.149219	

Nomb.	3. 55' 0"	D.	Nomb.	3. 55' 50"	D.	Nomb.	3. 56' 40"	D.
	Logarith.			Logarith.			Logarith.	
14100	4.149219	31	14150	4.150756	31	14200	4.152288	31
14101	4.149250	31	14151	4.150787	31	14201	4.152319	31
14102	4.149281	31	14152	4.150818	31	14202	4.152350	31
14103	4.149312	31	14153	4.150849	31	14203	4.152380	31
14104	4.149342	30	14154	4.150879	30	14204	4.152411	31
14105	4.149373	31	14155	4.150910	31	14205	4.152441	30
14106	4.149404	31	14156	4.150941	31	14206	4.152472	31
14107	4.149435	31	14157	4.150971	30	14207	4.152502	30
14108	4.149465	30	14158	4.151002	31	14208	4.152533	31
14109	4.149496	31	14159	4.151033	31	14209	4.152564	31
14110	4.149527	31	14160	4.151063	30	14210	4.152594	30
14111	4.149558	31	14161	4.151094	31	14211	4.152625	31
14112	4.149589	31	14162	4.151125	30	14212	4.152655	30
14113	4.149619	30	14163	4.151155	30	14213	4.152686	31
14114	4.149650	31	14164	4.151186	31	14214	4.152716	30
14115	4.149681	31	14165	4.151217	31	14215	4.152747	31
14116	4.149712	31	14166	4.151247	30	14216	4.152777	30
14117	4.149742	30	14167	4.151278	31	14217	4.152808	31
14118	4.149773	31	14168	4.151309	31	14218	4.152839	31
14119	4.149804	31	14169	4.151339	30	14219	4.152869	30
14120	4.149835	31	14170	4.151370	31	14220	4.152900	31
14121	4.149865	30	14171	4.151400	30	14221	4.152930	30
14122	4.149896	31	14172	4.151431	31	14222	4.152961	31
14123	4.149927	31	14173	4.151462	31	14223	4.152991	30
14124	4.149958	31	14174	4.151492	30	14224	4.153022	31
14125	4.149988	30	14175	4.151523	31	14225	4.153052	30
14126	4.150019	31	14176	4.151554	31	14226	4.153083	31
14127	4.150050	31	14177	4.151584	30	14227	4.153113	30
14128	4.150081	31	14178	4.151615	31	14228	4.153144	31
14129	4.150111	30	14179	4.151646	31	14229	4.153174	30
14130	4.150142	31	14180	4.151676	30	14230	4.153205	31
14131	4.150173	31	14181	4.151707	31	14231	4.153235	30
14132	4.150204	31	14182	4.151737	30	14232	4.153266	31
14133	4.150234	30	14183	4.151768	31	14233	4.153296	30
14134	4.150265	31	14184	4.151799	31	14234	4.153327	31
14135	4.150296	31	14185	4.151829	30	14235	4.153357	30
14136	4.150327	31	14186	4.151860	31	14236	4.153388	31
14137	4.150357	30	14187	4.151891	31	14237	4.153418	30
14138	4.150388	31	14188	4.151921	30	14238	4.153449	31
14139	4.150419	31	14189	4.151952	31	14239	4.153479	30
14140	4.150449	30	14190	4.151982	30	14240	4.153510	31
14141	4.150480	31	14191	4.152013	31	14241	4.153540	30
14142	4.150511	31	14192	4.152044	31	14242	4.153571	31
14143	4.150542	31	14193	4.152074	30	14243	4.153601	30
14144	4.150572	30	14194	4.152105	31	14244	4.153632	31
14145	4.150603	31	14195	4.152135	30	14245	4.153662	30
14146	4.150634	31	14196	4.152166	31	14246	4.153693	31
14147	4.150664	30	14197	4.152197	31	14247	4.153723	30
14148	4.150695	31	14198	4.152227	31	14248	4.153754	31
14149	4.150726	31	14199	4.152258	30	14249	4.153784	30
14150	4.150756	30	14200	4.152288	30	14250	4.153815	31

Nomb.	3. 57' 30"	D.	Nomb.	3. 58' 20"	D.	Nomb.	3. 59' 10"	D.
	Logarith.			Logarith.			Logarith.	
14250	4.153815	30	14300	4.155336	30	14350	4.156852	30
14251	4.153845	31	14301	4.155366	31	14351	4.156882	31
14252	4.153876	30	14302	4.155397	30	14352	4.156912	30
14253	4.153906	31	14303	4.155427	31	14353	4.156943	31
14254	4.153937	30	14304	4.155458	30	14354	4.156973	30
14255	4.153967	31	14305	4.155488	31	14355	4.157003	31
14256	4.153998	30	14306	4.155518	30	14356	4.157033	30
14257	4.154028	31	14307	4.155549	31	14357	4.157064	31
14258	4.154059	30	14308	4.155579	30	14358	4.157094	30
14259	4.154089	31	14309	4.155609	31	14359	4.157124	31
14260	4.154120	30	14310	4.155640	30	14360	4.157154	30
14261	4.154150	31	14311	4.155670	31	14361	4.157185	31
14262	4.154180	30	14312	4.155700	30	14362	4.157215	30
14263	4.154211	31	14313	4.155731	31	14363	4.157245	31
14264	4.154241	30	14314	4.155761	30	14364	4.157275	30
14265	4.154272	31	14315	4.155791	31	14365	4.157306	31
14266	4.154302	30	14316	4.155822	30	14366	4.157336	30
14267	4.154333	31	14317	4.155852	31	14367	4.157366	31
14268	4.154363	30	14318	4.155882	30	14368	4.157396	30
14269	4.154394	31	14319	4.155913	31	14369	4.157427	31
14270	4.154424	30	14320	4.155943	30	14370	4.157457	30
14271	4.154454	31	14321	4.155973	31	14371	4.157487	31
14272	4.154485	30	14322	4.156004	30	14372	4.157517	30
14273	4.154515	31	14323	4.156034	31	14373	4.157547	31
14274	4.154546	30	14324	4.156064	30	14374	4.157578	30
14275	4.154576	31	14325	4.156095	31	14375	4.157608	31
14276	4.154607	30	14326	4.156125	30	14376	4.157638	30
14277	4.154637	31	14327	4.156155	31	14377	4.157668	31
14278	4.154667	30	14328	4.156186	30	14378	4.157698	30
14279	4.154698	31	14329	4.156216	31	14379	4.157729	31
14280	4.154728	30	14330	4.156246	30	14380	4.157759	30
14281	4.154759	31	14331	4.156276	31	14381	4.157789	31
14282	4.154789	30	14332	4.156307	30	14382	4.157819	30
14283	4.154819	31	14333	4.156337	31	14383	4.157849	31
14284	4.154850	30	14334	4.156367	30	14384	4.157880	30
14285	4.154880	31	14335	4.156398	31	14385	4.157910	31
14286	4.154911	30	14336	4.156428	30	14386	4.157940	30
14287	4.154941	31	14337	4.156458	31	14387	4.157970	31
14288	4.154971	30	14338	4.156489	30	14388	4.158000	30
14289	4.155002	31	14339	4.156519	31	14389	4.158031	31
14290	4.155032	30	14340	4.156549	30	14390	4.158061	30
14291	4.155063	31	14341	4.156579	31	14391	4.158091	31
14292	4.155093	30	14342	4.156610	30	14392	4.158121	30
14293	4.155123	31	14343	4.156640	31	14393	4.158151	31
14294	4.155154	30	14344	4.156670	30	14394	4.158181	30
14295	4.155184	31	14345	4.156701	31	14395	4.158212	31
14296	4.155215	30	14346	4.156731	30	14396	4.158242	30
14297	4.155245	31	14347	4.156761	31	14397	4.158272	31
14298	4.155275	30	14348	4.156791	30	14398	4.158302	30
14299	4.155306	31	14349	4.156822	31	14399	4.158332	31
14300	4.155336	30	14350	4.156852	30	14400	4.158362	30

Nomb.	4. 0' 0"	D.	Nomb.	4. 0' 50"	D.	Nomb.	4. 1' 40"	D.
	Logarith.			Logarith.			Logarith.	
14400	4.158362	31	14450	4.159868	30	14500	4.161368	30
14401	4.158393	30	14451	4.159898	30	14501	4.161398	30
14402	4.158423	30	14452	4.159928	30	14502	4.161428	30
14403	4.158453	30	14453	4.159958	30	14503	4.161458	30
14404	4.158483	30	14454	4.159988	30	14504	4.161488	30
14405	4.158513	30	14455	4.160018	30	14505	4.161518	30
14406	4.158543	31	14456	4.160048	30	14506	4.161548	30
14407	4.158574	30	14457	4.160078	30	14507	4.161578	30
14408	4.158604	30	14458	4.160108	30	14508	4.161608	30
14409	4.158634	30	14459	4.160138	30	14509	4.161637	29
14410	4.158664	30	14460	4.160168	30	14510	4.161667	30
14411	4.158694	30	14461	4.160198	30	14511	4.161697	30
14412	4.158724	30	14462	4.160228	30	14512	4.161727	30
14413	4.158754	31	14463	4.160258	30	14513	4.161757	30
14414	4.158785	30	14464	4.160288	30	14514	4.161787	30
14415	4.158815	30	14465	4.160318	30	14515	4.161817	30
14416	4.158845	30	14466	4.160348	30	14516	4.161847	30
14417	4.158875	30	14467	4.160378	31	14517	4.161877	30
14418	4.158905	30	14468	4.160409	30	14518	4.161907	30
14419	4.158935	30	14469	4.160439	30	14519	4.161937	30
14420	4.158965	30	14470	4.160469	30	14520	4.161967	30
14421	4.158995	30	14471	4.160499	30	14521	4.161997	29
14422	4.159025	31	14472	4.160529	30	14522	4.162026	30
14423	4.159056	30	14473	4.160559	30	14523	4.162056	30
14424	4.159086	30	14474	4.160589	30	14524	4.162086	30
14425	4.159116	30	14475	4.160619	30	14525	4.162116	30
14426	4.159146	30	14476	4.160649	30	14526	4.162146	30
14427	4.159176	30	14477	4.160679	30	14527	4.162176	30
14428	4.159206	30	14478	4.160709	30	14528	4.162206	30
14429	4.159236	30	14479	4.160739	30	14529	4.162236	30
14430	4.159266	30	14480	4.160769	30	14530	4.162266	30
14431	4.159296	31	14481	4.160799	30	14531	4.162296	29
14432	4.159327	30	14482	4.160829	30	14532	4.162325	30
14433	4.159357	30	14483	4.160859	30	14533	4.162355	30
14434	4.159387	30	14484	4.160889	29	14534	4.162385	30
14435	4.159417	30	14485	4.160918	30	14535	4.162415	30
14436	4.159447	30	14486	4.160948	30	14536	4.162445	30
14437	4.159477	30	14487	4.160978	30	14537	4.162475	30
14438	4.159507	30	14488	4.161008	30	14538	4.162505	30
14439	4.159537	30	14489	4.161038	30	14539	4.162535	29
14440	4.159567	30	14490	4.161068	30	14540	4.162564	30
14441	4.159597	30	14491	4.161098	30	14541	4.162594	30
14442	4.159627	30	14492	4.161128	30	14542	4.162624	30
14443	4.159657	30	14493	4.161158	30	14543	4.162654	30
14444	4.159687	31	14494	4.161188	30	14544	4.162684	30
14445	4.159718	30	14495	4.161218	30	14545	4.162714	30
14446	4.159748	30	14496	4.161248	30	14546	4.162744	29
14447	4.159778	30	14497	4.161278	30	14547	4.162773	30
14448	4.159808	30	14498	4.161308	30	14548	4.162803	30
14449	4.159838	30	14499	4.161338	30	14549	4.162833	30
14450	4.159868	30	14500	4.161368	30	14550	4.162863	30

Nomb.	4. 2' 30"	D.	Nomb.	4. 3' 20"	D.	Nomb.	4. 4' 10"	D.
Logarith.			Logarith.			Logarith.		
14550	4.162863	30	14600	4.164353	30	14650	4.165838	29
14551	4.162893	30	14601	4.164383	29	14651	4.165867	30
14552	4.162923	30	14602	4.164412	29	14652	4.165897	30
14553	4.162953	30	14603	4.164442	30	14653	4.165927	29
14554	4.162982	29	14604	4.164472	30	14654	4.165956	29
14555	4.163012	30	14605	4.164502	30	14655	4.165986	30
14556	4.163042	30	14606	4.164531	29	14656	4.166015	29
14557	4.163072	30	14607	4.164561	30	14657	4.166045	30
14558	4.163102	30	14608	4.164591	30	14658	4.166075	30
14559	4.163132	30	14609	4.164620	29	14659	4.166104	29
14560	4.163161	29	14610	4.164650	30	14660	4.166134	30
14561	4.163191	30	14611	4.164680	30	14661	4.166164	30
14562	4.163221	30	14612	4.164710	29	14662	4.166193	29
14563	4.163251	30	14613	4.164739	29	14663	4.166223	30
14564	4.163281	30	14614	4.164769	30	14664	4.166252	29
14565	4.163310	29	14615	4.164799	30	14665	4.166282	30
14566	4.163340	30	14616	4.164829	30	14666	4.166312	30
14567	4.163370	30	14617	4.164858	29	14667	4.166341	29
14568	4.163400	30	14618	4.164888	30	14668	4.166371	30
14569	4.163430	30	14619	4.164918	30	14669	4.166401	30
14570	4.163460	30	14620	4.164947	29	14670	4.166430	29
14571	4.163489	29	14621	4.164977	30	14671	4.166460	30
14572	4.163519	30	14622	4.165007	30	14672	4.166489	30
14573	4.163549	30	14623	4.165036	29	14673	4.166519	30
14574	4.163579	30	14624	4.165066	30	14674	4.166548	29
14575	4.163609	30	14625	4.165096	30	14675	4.166578	29
14576	4.163638	29	14626	4.165126	30	14676	4.166608	30
14577	4.163668	30	14627	4.165155	29	14677	4.166637	29
14578	4.163698	30	14628	4.165185	30	14678	4.166667	29
14579	4.163728	30	14629	4.165215	30	14679	4.166696	30
14580	4.163758	29	14630	4.165244	29	14680	4.166726	30
14581	4.163787	29	14631	4.165274	30	14681	4.166756	30
14582	4.163817	30	14632	4.165304	30	14682	4.166785	29
14583	4.163847	30	14633	4.165333	29	14683	4.166815	29
14584	4.163877	29	14634	4.165363	30	14684	4.166844	30
14585	4.163906	30	14635	4.165393	30	14685	4.166874	30
14586	4.163936	30	14636	4.165422	29	14686	4.166904	29
14587	4.163966	30	14637	4.165452	30	14687	4.166933	30
14588	4.163996	30	14638	4.165482	30	14688	4.166963	29
14589	4.164026	29	14639	4.165511	29	14689	4.166992	29
14590	4.164055	30	14640	4.165541	30	14690	4.167022	29
14591	4.164085	30	14641	4.165571	29	14691	4.167051	30
14592	4.164115	30	14642	4.165600	30	14692	4.167081	29
14593	4.164145	29	14643	4.165630	30	14693	4.167110	30
14594	4.164174	30	14644	4.165660	30	14694	4.167140	30
14595	4.164204	30	14645	4.165689	29	14695	4.167170	29
14596	4.164234	30	14646	4.165719	30	14696	4.167199	30
14597	4.164264	29	14647	4.165749	29	14697	4.167229	29
14598	4.164293	30	14648	4.165778	30	14698	4.167258	30
14599	4.164323	30	14649	4.165808	30	14699	4.167288	29
14600	4.164353	30	14650	4.165838	30	14700	4.167317	29

Nomb.	4 5' 0"	D.	Nomb.	4 5' 50"	D.	Nomb.	4 6' 40"	D.
Logarith.			Logarith.			Logarith.		
14700	4.167317		14750	4.168792		14800	4.170262	
14701	4.167347	30	14751	4.168821	29	14801	4.170291	29
14702	4.167376	29	14752	4.168851	30	14802	4.170320	29
14703	4.167406	30	14753	4.168880	29	14803	4.170350	30
14704	4.167435	29	14754	4.168910	30	14804	4.170379	29
		30			29			29
14705	4.167465	30	14755	4.168939	30	14805	4.170408	30
14706	4.167495	29	14756	4.168969	29	14806	4.170438	29
14707	4.167524	30	14757	4.168998	30	14807	4.170467	29
14708	4.167554	29	14758	4.169028	29	14808	4.170496	30
14709	4.167583	30	14759	4.169057	29	14809	4.170526	29
		29			30			29
14710	4.167613	29	14760	4.169086	30	14810	4.170555	29
14711	4.167642	30	14761	4.169116	29	14811	4.170584	30
14712	4.167672	29	14762	4.169145	30	14812	4.170614	29
14713	4.167701	30	14763	4.169175	29	14813	4.170643	29
14714	4.167731	29	14764	4.169204	30	14814	4.170672	30
		30			29			29
14715	4.167760	30	14765	4.169233	30	14815	4.170702	29
14716	4.167790	29	14766	4.169263	29	14816	4.170731	30
14717	4.167819	30	14767	4.169292	30	14817	4.170760	29
14718	4.167849	29	14768	4.169322	29	14818	4.170790	30
14719	4.167878	30	14769	4.169351	29	14819	4.170819	29
		29			30			30
14720	4.167908	29	14770	4.169380	30	14820	4.170848	29
14721	4.167937	30	14771	4.169410	29	14821	4.170878	30
14722	4.167967	29	14772	4.169439	30	14822	4.170907	29
14723	4.167996	30	14773	4.169469	29	14823	4.170936	30
14724	4.168026	29	14774	4.169498	29	14824	4.170965	29
		30			29			30
14725	4.168055	30	14775	4.169527	30	14825	4.170995	29
14726	4.168085	29	14776	4.169557	29	14826	4.171024	30
14727	4.168114	30	14777	4.169586	30	14827	4.171053	29
14728	4.168144	29	14778	4.169616	29	14828	4.171083	30
14729	4.168173	30	14779	4.169645	29	14829	4.171112	29
		29			30			30
14730	4.168203	29	14780	4.169674	30	14830	4.171141	29
14731	4.168232	30	14781	4.169704	29	14831	4.171170	30
14732	4.168262	29	14782	4.169733	30	14832	4.171200	29
14733	4.168291	30	14783	4.169763	29	14833	4.171229	30
14734	4.168321	29	14784	4.169792	29	14834	4.171258	29
		30			30			30
14735	4.168350	29	14785	4.169821	29	14835	4.171288	29
14736	4.168380	30	14786	4.169850	30	14836	4.171317	29
14737	4.168409	29	14787	4.169880	29	14837	4.171346	30
14738	4.168439	30	14788	4.169909	30	14838	4.171375	29
14739	4.168468	29	14789	4.169939	29	14839	4.171405	30
		30			29			29
14740	4.168497	30	14790	4.169968	30	14840	4.171434	29
14741	4.168527	29	14791	4.169998	29	14841	4.171463	30
14742	4.168556	30	14792	4.170027	29	14842	4.171492	29
14743	4.168586	29	14793	4.170056	30	14843	4.171522	30
14744	4.168615	30	14794	4.170086	29	14844	4.171551	29
		29			30			29
14745	4.168645	29	14795	4.170115	30	14845	4.171580	29
14746	4.168674	30	14796	4.170144	29	14846	4.171609	30
14747	4.168704	29	14797	4.170174	30	14847	4.171639	29
14748	4.168733	30	14798	4.170203	29	14848	4.171668	30
14749	4.168763	29	14799	4.170232	29	14849	4.171697	29
14750	4.168792	30	14800	4.170262	30	14850	4.171726	29

Nomb.	4.7° 30'	D.	Nomb.	4.8° 20'	D.	Nomb.	4.9° 10'	D.
	Logarith.			Logarith.			Logarith.	
14850	4.171726	30	14900	4.173186	29	14950	4.174641	29
14851	4.171756	30	14901	4.173215	29	14951	4.174670	29
14852	4.171785	29	14902	4.173245	30	14952	4.174699	29
14853	4.171814	29	14903	4.173274	29	14953	4.174728	29
14854	4.171843	29	14904	4.173303	29	14954	4.174757	29
14855	4.171873	30	14905	4.173332	29	14955	4.174786	29
14856	4.171902	29	14906	4.173361	29	14956	4.174815	29
14857	4.171931	29	14907	4.173390	29	14957	4.174844	29
14858	4.171960	29	14908	4.173419	29	14958	4.174874	30
14859	4.171990	30	14909	4.173449	30	14959	4.174903	29
14860	4.172019	29	14910	4.173478	29	14960	4.174932	29
14861	4.172048	29	14911	4.173507	29	14961	4.174961	29
14862	4.172077	29	14912	4.173536	29	14962	4.174990	29
14863	4.172106	29	14913	4.173565	29	14963	4.175019	29
14864	4.172136	30	14914	4.173594	29	14964	4.175048	29
14865	4.172165	29	14915	4.173623	29	14965	4.175077	29
14866	4.172194	29	14916	4.173652	29	14966	4.175106	29
14867	4.172223	29	14917	4.173681	29	14967	4.175135	29
14868	4.172253	30	14918	4.173711	30	14968	4.175164	29
14869	4.172282	29	14919	4.173740	29	14969	4.175193	29
14870	4.172311	29	14920	4.173769	29	14970	4.175222	29
14871	4.172340	29	14921	4.173798	29	14971	4.175251	29
14872	4.172369	29	14922	4.173827	29	14972	4.175280	29
14873	4.172399	30	14923	4.173856	29	14973	4.175309	29
14874	4.172428	29	14924	4.173885	29	14974	4.175338	29
14875	4.172457	29	14925	4.173914	29	14975	4.175367	29
14876	4.172486	29	14926	4.173943	29	14976	4.175396	29
14877	4.172515	29	14927	4.173973	30	14977	4.175425	29
14878	4.172545	30	14928	4.174002	29	14978	4.175454	29
14879	4.172574	29	14929	4.174031	29	14979	4.175483	29
14880	4.172603	29	14930	4.174060	29	14980	4.175512	29
14881	4.172632	29	14931	4.174089	29	14981	4.175541	29
14882	4.172661	29	14932	4.174118	29	14982	4.175570	29
14883	4.172691	30	14933	4.174147	29	14983	4.175599	29
14884	4.172720	29	14934	4.174176	29	14984	4.175628	29
14885	4.172749	29	14935	4.174205	29	14985	4.175657	29
14886	4.172778	29	14936	4.174234	29	14986	4.175686	29
14887	4.172807	29	14937	4.174263	29	14987	4.175715	29
14888	4.172836	29	14938	4.174292	29	14988	4.175744	29
14889	4.172866	30	14939	4.174322	30	14989	4.175773	29
14890	4.172895	29	14940	4.174351	29	14990	4.175802	29
14891	4.172924	29	14941	4.174380	29	14991	4.175831	29
14892	4.172953	29	14942	4.174409	29	14992	4.175860	29
14893	4.172982	29	14943	4.174438	29	14993	4.175889	29
14894	4.173011	29	14944	4.174467	29	14994	4.175918	28
14895	4.173041	30	14945	4.174496	29	14995	4.175946	29
14896	4.173070	29	14946	4.174525	29	14996	4.175975	29
14897	4.173099	29	14947	4.174554	29	14997	4.176004	29
14898	4.173128	29	14948	4.174583	29	14998	4.176033	29
14899	4.173157	29	14949	4.174612	29	14999	4.176062	29
14900	4.173186	29	14950	4.174641	29	15000	4.176091	29

Nomb.	4. 10' 0"	D.	Nomb.	4. 10' 50"	D.	Nomb.	4. 11' 40"	D.
	Logarith.			Logarith.			Logarith.	
15000	4.176091	29	15050	4.177537	28	15100	4.178977	29
15001	4.176120	29	15051	4.177565	29	15101	4.179006	28
15002	4.176149	29	15052	4.177594	29	15102	4.179034	29
15003	4.176178	29	15053	4.177623	29	15103	4.179063	29
15004	4.176207	29	15054	4.177652	29	15104	4.179092	29
15005	4.176236	29	15055	4.177681	29	15105	4.179121	29
15006	4.176265	29	15056	4.177710	28	15106	4.179149	28
15007	4.176294	29	15057	4.177738	28	15107	4.179178	29
15008	4.176323	29	15058	4.177767	29	15108	4.179207	29
15009	4.176352	29	15059	4.177796	29	15109	4.179236	29
15010	4.176381	29	15060	4.177825	29	15110	4.179264	28
15011	4.176410	29	15061	4.177854	29	15111	4.179293	29
15012	4.176439	29	15062	4.177883	29	15112	4.179322	29
15013	4.176468	29	15063	4.177911	28	15113	4.179351	29
15014	4.176496	28	15064	4.177940	29	15114	4.179379	28
15015	4.176525	29	15065	4.177969	29	15115	4.179408	29
15016	4.176554	29	15066	4.177998	29	15116	4.179437	29
15017	4.176583	29	15067	4.178027	29	15117	4.179466	29
15018	4.176612	29	15068	4.178056	29	15118	4.179494	28
15019	4.176641	29	15069	4.178084	28	15119	4.179523	29
15020	4.176670	29	15070	4.178113	29	15120	4.179552	29
15021	4.176699	29	15071	4.178142	29	15121	4.179581	29
15022	4.176728	29	15072	4.178171	29	15122	4.179609	28
15023	4.176757	29	15073	4.178200	29	15123	4.179638	29
15024	4.176786	29	15074	4.178229	29	15124	4.179667	29
15025	4.176815	29	15075	4.178257	28	15125	4.179695	28
15026	4.176843	28	15076	4.178286	29	15126	4.179724	29
15027	4.176872	29	15077	4.178315	29	15127	4.179753	29
15028	4.176901	29	15078	4.178344	29	15128	4.179782	29
15029	4.176930	29	15079	4.178373	29	15129	4.179810	28
15030	4.176959	29	15080	4.178401	28	15130	4.179839	29
15031	4.176988	29	15081	4.178430	29	15131	4.179868	29
15032	4.177017	29	15082	4.178459	29	15132	4.179896	28
15033	4.177046	29	15083	4.178488	29	15133	4.179925	29
15034	4.177075	29	15084	4.178517	29	15134	4.179954	29
15035	4.177103	28	15085	4.178545	28	15135	4.179982	28
15036	4.177132	29	15086	4.178574	29	15136	4.180011	29
15037	4.177161	29	15087	4.178603	29	15137	4.180040	29
15038	4.177190	29	15088	4.178632	29	15138	4.180069	29
15039	4.177219	29	15089	4.178660	28	15139	4.180097	28
15040	4.177248	29	15090	4.178689	29	15140	4.180126	29
15041	4.177277	29	15091	4.178718	29	15141	4.180155	29
15042	4.177306	29	15092	4.178747	29	15142	4.180183	28
15043	4.177334	28	15093	4.178776	29	15143	4.180212	29
15044	4.177363	29	15094	4.178804	28	15144	4.180241	29
15045	4.177392	29	15095	4.178833	29	15145	4.180269	28
15046	4.177421	29	15096	4.178862	29	15146	4.180298	29
15047	4.177450	29	15097	4.178891	29	15147	4.180327	29
15048	4.177479	29	15098	4.178919	28	15148	4.180355	28
15049	4.177508	29	15099	4.178948	29	15149	4.180384	29
15050	4.177537	29	15100	4.178977	29	15150	4.180413	29

Nomb.	4. 12' 30"	D.	Nomb.	4. 13' 20"	D.	Nomb.	4. 14' 10"	D.
	Logarith.			Logarith.			Logarith.	
15150	4.180413	28	15200	4.181844	28	15250	4.183270	28
15151	4.180441	28	15201	4.181872	28	15251	4.183298	28
15152	4.180470	29	15202	4.181901	29	15252	4.183327	29
15153	4.180499	29	15203	4.181929	28	15253	4.183355	28
15154	4.180527	28	15204	4.181958	29	15254	4.183384	29
15155	4.180556	29	15205	4.181986	28	15255	4.183412	28
15156	4.180585	29	15206	4.182015	29	15256	4.183441	29
15157	4.180613	28	15207	4.182044	29	15257	4.183469	28
15158	4.180642	29	15208	4.182072	28	15258	4.183498	29
15159	4.180671	29	15209	4.182101	29	15259	4.183526	28
15160	4.180699	28	15210	4.182129	28	15260	4.183555	29
15161	4.180728	29	15211	4.182158	29	15261	4.183583	28
15162	4.180757	29	15212	4.182186	28	15262	4.183611	28
15163	4.180785	28	15213	4.182215	29	15263	4.183640	29
15164	4.180814	29	15214	4.182243	28	15264	4.183668	28
15165	4.180842	28	15215	4.182272	29	15265	4.183697	29
15166	4.180871	29	15216	4.182301	29	15266	4.183725	28
15167	4.180900	28	15217	4.182329	28	15267	4.183754	29
15168	4.180928	28	15218	4.182358	29	15268	4.183782	28
15169	4.180957	29	15219	4.182386	28	15269	4.183811	29
15170	4.180986	29	15220	4.182415	29	15270	4.183839	28
15171	4.181014	28	15221	4.182443	28	15271	4.183868	29
15172	4.181043	29	15222	4.182472	29	15272	4.183896	28
15173	4.181071	28	15223	4.182500	28	15273	4.183924	28
15174	4.181100	29	15224	4.182529	29	15274	4.183953	29
15175	4.181129	29	15225	4.182557	28	15275	4.183981	28
15176	4.181157	28	15226	4.182586	29	15276	4.184010	29
15177	4.181186	29	15227	4.182614	28	15277	4.184038	28
15178	4.181215	29	15228	4.182643	29	15278	4.184067	29
15179	4.181243	28	15229	4.182671	28	15279	4.184095	28
15180	4.181272	29	15230	4.182700	29	15280	4.184123	28
15181	4.181300	28	15231	4.182728	28	15281	4.184152	29
15182	4.181329	29	15232	4.182757	29	15282	4.184180	28
15183	4.181358	28	15233	4.182785	28	15283	4.184209	29
15184	4.181386	28	15234	4.182814	29	15284	4.184237	28
15185	4.181415	29	15235	4.182842	28	15285	4.184265	28
15186	4.181443	28	15236	4.182871	29	15286	4.184294	29
15187	4.181472	29	15237	4.182900	29	15287	4.184322	28
15188	4.181501	29	15238	4.182928	28	15288	4.184351	29
15189	4.181529	28	15239	4.182957	29	15289	4.184379	28
15190	4.181558	29	15240	4.182985	28	15290	4.184408	29
15191	4.181586	28	15241	4.183014	29	15291	4.184436	28
15192	4.181615	29	15242	4.183042	28	15292	4.184464	29
15193	4.181644	28	15243	4.183070	29	15293	4.184493	28
15194	4.181672	29	15244	4.183099	28	15294	4.184521	29
15195	4.181701	28	15245	4.183127	29	15295	4.184550	28
15196	4.181729	29	15246	4.183156	28	15296	4.184578	29
15197	4.181758	28	15247	4.183184	29	15297	4.184606	28
15198	4.181786	29	15248	4.183213	28	15298	4.184635	29
15199	4.181815	28	15249	4.183241	29	15299	4.184663	28
15200	4.181844	29	15250	4.183270	28	15300	4.184691	29

Nomb.	4. 15' 0"	D.	Nomb.	4. 15' 50"	D.	Nomb.	4. 16' 40"	D.
15300	4.184691		15350	4.186108	29	15400	4.187521	28
15301	4.184720	29	15351	4.186137	28	15401	4.187549	28
15302	4.184748	28	15352	4.186165	28	15402	4.187577	28
15303	4.184777	29	15353	4.186193	28	15403	4.187605	28
15304	4.184805	28	15354	4.186222	29	15404	4.187634	29
		28			28	15405	4.187662	28
15305	4.184833	28	15355	4.186250	28	15406	4.187690	28
15306	4.184862	29	15356	4.186278	28	15407	4.187718	28
15307	4.184890	28	15357	4.186306	29	15408	4.187746	28
15308	4.184919	29	15358	4.186335	28	15409	4.187774	28
15309	4.184947	28	15359	4.186363	28			29
		28			28	15410	4.187803	28
15310	4.184975	29	15360	4.186391	29	15411	4.187831	28
15311	4.185004	29	15361	4.186420	28	15412	4.187859	28
15312	4.185032	28	15362	4.186448	28	15413	4.187887	28
15313	4.185060	28	15363	4.186476	28	15414	4.187915	28
15314	4.185089	29	15364	4.186504	29			29
		28			28	15415	4.187944	28
15315	4.185117	28	15365	4.186533	28	15416	4.187972	28
15316	4.185145	28	15366	4.186561	28	15417	4.188000	28
15317	4.185174	29	15367	4.186589	28	15418	4.188028	28
15318	4.185202	28	15368	4.186617	29	15419	4.188056	28
15319	4.185230	28	15369	4.186646	28			28
		29			28	15420	4.188084	29
15320	4.185259	28	15370	4.186674	28	15421	4.188113	28
15321	4.185287	29	15371	4.186702	28	15422	4.188141	28
15322	4.185316	29	15372	4.186730	29	15423	4.188169	28
15323	4.185344	28	15373	4.186759	28	15424	4.188197	28
15324	4.185372	28	15374	4.186787	28			28
		29			28	15425	4.188225	28
15325	4.185401	28	15375	4.186815	28	15426	4.188253	29
15326	4.185429	28	15376	4.186843	29	15427	4.188282	28
15327	4.185457	29	15377	4.186872	28	15428	4.188310	28
15328	4.185486	29	15378	4.186900	28	15429	4.188338	28
15329	4.185514	28	15379	4.186928	28			28
		28			29	15430	4.188366	28
15330	4.185542	29	15380	4.186956	29	15431	4.188394	28
15331	4.185571	28	15381	4.186985	28	15432	4.188422	28
15332	4.185599	28	15382	4.187013	28	15433	4.188450	29
15333	4.185627	29	15383	4.187041	28	15434	4.188479	28
15334	4.185656	29	15384	4.187069	29			28
		28			28	15435	4.188507	28
15335	4.185684	28	15385	4.187098	28	15436	4.188535	28
15336	4.185712	28	15386	4.187126	28	15437	4.188563	28
15337	4.185740	29	15387	4.187154	28	15438	4.188591	28
15338	4.185769	29	15388	4.187182	28	15439	4.188619	28
15339	4.185797	28	15389	4.187210	29			28
		28			28	15440	4.188647	28
15340	4.185825	29	15390	4.187239	28	15441	4.188675	29
15341	4.185854	28	15391	4.187267	28	15442	4.188704	28
15342	4.185882	28	15392	4.187295	28	15443	4.188732	28
15343	4.185910	29	15393	4.187323	29	15444	4.188760	28
15344	4.185939	29	15394	4.187352	28			28
		28			28	15445	4.188788	28
15345	4.185967	28	15395	4.187380	28	15446	4.188816	28
15346	4.185995	29	15396	4.187408	28	15447	4.188844	28
15347	4.186024	28	15397	4.187436	28	15448	4.188872	28
15348	4.186052	28	15398	4.187464	29	15449	4.188900	29
15349	4.186080	28	15399	4.187493	28			29
15350	4.186108	28	15400	4.187521	28	15450	4.188929	

Nomb.	4. 17' 30"	D.	Nomb.	4. 18' 20"	D.	Nomb.	4. 19' 10"	D.
	Logarith.			Logarith.			Logarith.	
15450	4.188929	28	15500	4.190332	28	15550	4.191730	28
15451	4.188957	28	15501	4.190360	28	15551	4.191758	28
15452	4.188985	28	15502	4.190388	28	15552	4.191786	28
15453	4.189013	28	15503	4.190416	28	15553	4.191814	28
15454	4.189041	28	15504	4.190444	28	15554	4.191842	28
15455	4.189069	28	15505	4.190472	28	15555	4.191870	28
15456	4.189097	28	15506	4.190500	28	15556	4.191898	28
15457	4.189125	28	15507	4.190528	28	15557	4.191926	28
15458	4.189153	28	15508	4.190556	28	15558	4.191954	28
15459	4.189181	28	15509	4.190584	28	15559	4.191982	28
15460	4.189210	29	15510	4.190612	28	15560	4.192010	28
15461	4.189238	28	15511	4.190640	28	15561	4.192038	28
15462	4.189266	28	15512	4.190668	28	15562	4.192065	27
15463	4.189294	28	15513	4.190696	28	15563	4.192093	28
15464	4.189322	28	15514	4.190724	28	15564	4.192121	28
15465	4.189350	28	15515	4.190752	28	15565	4.192149	28
15466	4.189378	28	15516	4.190780	28	15566	4.192177	28
15467	4.189406	28	15517	4.190808	28	15567	4.192205	28
15468	4.189434	28	15518	4.190836	28	15568	4.192233	28
15469	4.189462	28	15519	4.190864	28	15569	4.192261	28
15470	4.189490	28	15520	4.190892	28	15570	4.192289	28
15471	4.189518	28	15521	4.190920	28	15571	4.192317	28
15472	4.189546	28	15522	4.190948	28	15572	4.192344	27
15473	4.189575	29	15523	4.190976	28	15573	4.192372	28
15474	4.189603	28	15524	4.191004	28	15574	4.192400	28
15475	4.189631	28	15525	4.191032	28	15575	4.192428	28
15476	4.189659	28	15526	4.191060	28	15576	4.192456	28
15477	4.189687	28	15527	4.191088	28	15577	4.192484	28
15478	4.189715	28	15528	4.191116	28	15578	4.192512	28
15479	4.189743	28	15529	4.191144	28	15579	4.192540	28
15480	4.189771	28	15530	4.191171	27	15580	4.192567	27
15481	4.189799	28	15531	4.191199	28	15581	4.192595	28
15482	4.189827	28	15532	4.191227	28	15582	4.192623	28
15483	4.189855	28	15533	4.191255	28	15583	4.192651	28
15484	4.189883	28	15534	4.191283	28	15584	4.192679	28
15485	4.189911	28	15535	4.191311	28	15585	4.192707	28
15486	4.189939	28	15536	4.191339	28	15586	4.192735	28
15487	4.189967	28	15537	4.191367	28	15587	4.192763	28
15488	4.189995	28	15538	4.191395	28	15588	4.192790	27
15489	4.190023	28	15539	4.191423	28	15589	4.192818	28
15490	4.190051	28	15540	4.191451	28	15590	4.192846	28
15491	4.190080	29	15541	4.191479	28	15591	4.192874	28
15492	4.190108	28	15542	4.191507	28	15592	4.192902	28
15493	4.190136	28	15543	4.191535	28	15593	4.192930	28
15494	4.190164	28	15544	4.191563	28	15594	4.192958	28
15495	4.190192	28	15545	4.191591	28	15595	4.192985	27
15496	4.190220	28	15546	4.191619	28	15596	4.193013	28
15497	4.190248	28	15547	4.191647	28	15597	4.193041	28
15498	4.190276	28	15548	4.191675	28	15598	4.193069	28
15499	4.190304	28	15549	4.191703	28	15599	4.193097	28
15500	4.190332	28	15550	4.191730	27	15600	4.193125	28

Nomb.	4. 20' 0"	D.	Nomb.	4. 20' 50"	D.	Nomb.	4. 21' 40"	D.
	Logarith.			Logarith.			Logarith.	
15600	4.193125		15650	4.194514	28	15700	4.195900	27
15601	4.193152	27	15651	4.194542	28	15701	4.195927	27
15602	4.193180	28	15652	4.194570	28	15702	4.195955	28
15603	4.193208	28	15653	4.194598	28	15703	4.195983	28
15604	4.193236	28	15654	4.194625	27	15704	4.196010	27
15605	4.193264	28	15655	4.194653	28	15705	4.196038	28
15606	4.193292	28	15656	4.194681	88	15706	4.196066	28
15607	4.193319	27	15657	4.194709	28	15707	4.196093	27
15608	4.193347	28	15658	4.194736	27	15708	4.196121	28
15609	4.193375	28	15659	4.194764	28	15709	4.196148	27
15610	4.193403	28	15660	4.194792	28	15710	4.196176	28
15611	4.193431	28	15661	4.194819	27	15711	4.196204	28
15612	4.193458	27	15662	4.194847	28	15712	4.196231	27
15613	4.193486	28	15663	4.194875	28	15713	4.196259	28
15614	4.193514	28	15664	4.194903	28	15714	4.196287	28
15615	4.193542	28	15665	4.194930	27	15715	4.196314	27
15616	4.193570	28	15666	4.194958	28	15716	4.196342	28
15617	4.193598	28	15667	4.194986	28	15717	4.196370	28
15618	4.193625	27	15668	4.195013	27	15718	4.196397	27
15619	4.193653	28	15669	4.195041	28	15719	4.196425	28
15620	4.193681	28	15670	4.195069	28	15720	4.196452	27
15621	4.193709	28	15671	4.195097	28	15721	4.196480	28
15622	4.193737	28	15672	4.195124	27	15722	4.196508	28
15623	4.193764	27	15673	4.195152	28	15723	4.196535	27
15624	4.193792	28	15674	4.195180	28	15724	4.196563	28
15625	4.193820	28	15675	4.195207	27	15725	4.196591	28
15626	4.193848	28	15676	4.195235	28	15726	4.196618	27
15627	4.193876	28	15677	4.195263	28	15727	4.196646	28
15628	4.193903	27	15678	4.195291	28	15728	4.196673	27
15629	4.193931	28	15679	4.195318	27	15729	4.196701	28
15630	4.193959	28	15680	4.195346	28	15730	4.196729	28
15631	4.193987	28	15681	4.195374	28	15731	4.196756	27
15632	4.194014	27	15682	4.195401	27	15732	4.196784	28
15633	4.194042	28	15683	4.195429	28	15733	4.196811	27
15634	4.194070	28	15684	4.195457	28	15734	4.196839	28
15635	4.194098	28	15685	4.195484	27	15735	4.196867	28
15636	4.194126	28	15686	4.195512	28	15736	4.196894	27
15637	4.194153	27	15687	4.195540	28	15737	4.196922	28
15638	4.194181	28	15688	4.195568	28	15738	4.196949	27
15639	4.194209	28	15689	4.195595	27	15739	4.196977	28
15640	4.194237	28	15690	4.195623	28	15740	4.197005	28
15641	4.194264	27	15691	4.195651	28	15741	4.197032	27
15642	4.194292	28	15692	4.195678	27	15742	4.197060	28
15643	4.194320	28	15693	4.195706	28	15743	4.197087	27
15644	4.194348	28	15694	4.195734	28	15744	4.197115	28
15645	4.194376	28	15695	4.195761	27	15745	4.197143	28
15646	4.194403	27	15696	4.195789	28	15746	4.197170	27
15647	4.194431	28	15697	4.195817	28	15747	4.197198	28
15648	4.194459	28	15698	4.195844	27	15748	4.197225	27
15649	4.194487	28	15699	4.195872	28	15749	4.197253	28
15650	4.194514	27	15700	4.195900	28	15750	4.197281	28

Nomb.	4. 22' 30"	D.	Nomb.	4. 23' 20"	D.	Nomb.	4. 24' 10"	D.
	Logarith.			Logarith.			Logarith.	
15750	4.197281	27	15800	4.198657	28	15850	4.200029	28
15751	4.197308	27	15801	4.198685	28	15851	4.200057	27
15752	4.197336	28	15802	4.198712	27	15852	4.200084	27
15753	4.197363	27	15803	4.198739	27	15853	4.200111	27
15754	4.197391	28	15804	4.198767	28	15854	4.200139	28
15755	4.197418	27	15805	4.198794	27	15855	4.200166	27
15756	4.197446	28	15806	4.198822	28	15856	4.200194	27
15757	4.197473	27	15807	4.198849	27	15857	4.200221	27
15758	4.197501	28	15808	4.198877	28	15858	4.200248	27
15759	4.197529	28	15809	4.198904	27	15859	4.200276	28
15760	4.197556	27	15810	4.198932	28	15860	4.200303	27
15761	4.197584	28	15811	4.198959	27	15861	4.200331	28
15762	4.197611	27	15812	4.198987	28	15862	4.200358	27
15763	4.197639	28	15813	4.199014	27	15863	4.200385	27
15764	4.197666	27	15814	4.199042	28	15864	4.200413	28
15765	4.197694	28	15815	4.199069	27	15865	4.200440	27
15766	4.197722	28	15816	4.199097	28	15866	4.200467	27
15767	4.197749	27	15817	4.199124	28	15867	4.200495	28
15768	4.197777	28	15818	4.199152	28	15868	4.200522	27
15769	4.197804	27	15819	4.199179	27	15869	4.200550	28
15770	4.197832	28	15820	4.199206	27	15870	4.200577	27
15771	4.197859	27	15821	4.199234	28	15871	4.200604	27
15772	4.197887	28	15822	4.199261	27	15872	4.200632	28
15773	4.197914	27	15823	4.199289	28	15873	4.200659	27
15774	4.197942	28	15824	4.199316	27	15874	4.200686	27
15775	4.197969	27	15825	4.199344	28	15875	4.200714	28
15776	4.197997	28	15826	4.199371	27	15876	4.200741	27
15777	4.198024	27	15827	4.199399	28	15877	4.200768	27
15778	4.198052	28	15828	4.199426	27	15878	4.200796	28
15779	4.198079	27	15829	4.199453	27	15879	4.200823	27
15780	4.198107	28	15830	4.199481	28	15880	4.200850	27
15781	4.198134	27	15831	4.199508	27	15881	4.200878	28
15782	4.198162	28	15832	4.199536	28	15882	4.200905	27
15783	4.198190	27	15833	4.199563	27	15883	4.200932	27
15784	4.198217	28	15834	4.199591	28	15884	4.200960	28
15785	4.198245	27	15835	4.199618	27	15885	4.200987	27
15786	4.198272	28	15836	4.199645	27	15886	4.201015	28
15787	4.198300	27	15837	4.199673	28	15887	4.201042	27
15788	4.198327	28	15838	4.199700	27	15888	4.201069	27
15789	4.198355	27	15839	4.199728	28	15889	4.201097	27
15790	4.198382	28	15840	4.199755	27	15890	4.201124	28
15791	4.198410	27	15841	4.199783	27	15891	4.201151	27
15792	4.198437	28	15842	4.199810	27	15892	4.201179	28
15793	4.198465	27	15843	4.199837	28	15893	4.201206	27
15794	4.198492	28	15844	4.199865	27	15894	4.201233	27
15795	4.198520	27	15845	4.199892	28	15895	4.201260	27
15796	4.198547	28	15846	4.199920	27	15896	4.201288	28
15797	4.198575	27	15847	4.199947	27	15897	4.201315	27
15798	4.198602	28	15848	4.199974	28	15898	4.201342	27
15799	4.198630	27	15849	4.200002	27	15899	4.201370	28
15800	4.198657	28	15850	4.200029	27	15900	4.201397	27

Nomb.	4. 25' 0"	D.	Nomb.	4. 25' 50"	D.	Nomb.	4. 26' 40"	D.
15900	4.201397		15950	4.202761		16000	4.204126	
15901	4.201424	27	15951	4.202788	27	16001	4.204147	27
15902	4.201452	28	15952	4.202815	27	16002	4.204174	27
15903	4.201479	27	15953	4.202842	27	16003	4.204201	27
15904	4.201506	27	15954	4.202870	28	16004	4.204228	27
		28						28
15905	4.201534		15955	4.202897	27	16005	4.204256	
15906	4.201561	27	15956	4.202924	27	16006	4.204283	27
15907	4.201588	27	15957	4.202951	27	16007	4.204310	27
15908	4.201616	28	15958	4.202978	27	16008	4.204337	27
15909	4.201643	27	15959	4.203006	28	16009	4.204364	27
		27						27
15910	4.201670		15960	4.203033	27	16010	4.204391	
15911	4.201697	27	15961	4.203060	27	16011	4.204418	27
15912	4.201725	28	15962	4.203087	27	16012	4.204446	28
15913	4.201752	27	15963	4.203114	27	16013	4.204473	27
15914	4.201779	27	15964	4.203142	28	16014	4.204500	27
		28						27
15915	4.201807		15965	4.203169	27	16015	4.204527	
15916	4.201834	27	15966	4.203196	27	16016	4.204554	27
15917	4.201861	27	15967	4.203223	27	16017	4.204581	27
15918	4.201888	28	15968	4.203250	27	16018	4.204608	27
15919	4.201916	28	15969	4.203278	28	16019	4.204635	27
		27						27
15920	4.201943		15970	4.203305	27	16020	4.204662	
15921	4.201970	27	15971	4.203332	27	16021	4.204690	28
15922	4.201998	28	15972	4.203359	27	16022	4.204717	27
15923	4.202025	27	15973	4.203386	27	16023	4.204744	27
15924	4.202052	27	15974	4.203414	28	16024	4.204771	27
		27						27
15925	4.202079		15975	4.203441	27	16025	4.204798	
15926	4.202107	28	15976	4.203468	27	16026	4.204825	27
15927	4.202134	27	15977	4.203495	27	16027	4.204852	27
15928	4.202161	27	15978	4.203522	27	16028	4.204879	27
15929	4.202188	27	15979	4.203550	28	16029	4.204906	27
		28						27
15930	4.202216		15980	4.203577	27	16030	4.204933	
15931	4.202243	27	15981	4.203604	27	16031	4.204961	28
15932	4.202270	27	15982	4.203631	27	16032	4.204988	27
15933	4.202298	28	15983	4.203658	27	16033	4.205015	27
15934	4.202325	27	15984	4.203685	27	16034	4.205042	27
		27			28			27
15935	4.202352		15985	4.203713		16035	4.205069	
15936	4.202379	27	15986	4.203740	27	16036	4.205096	27
15937	4.202407	28	15987	4.203767	27	16037	4.205123	27
15938	4.202434	27	15988	4.203794	27	16038	4.205150	27
15939	4.202461	27	15989	4.203821	27	16039	4.205177	27
		27						27
15940	4.202488		15990	4.203848	27	16040	4.205204	
15941	4.202516	28	15991	4.203876	28	16041	4.205231	27
15942	4.202543	27	15992	4.203903	27	16042	4.205258	28
15943	4.202570	27	15993	4.203930	27	16043	4.205286	27
15944	4.202597	27	15994	4.203957	27	16044	4.205313	27
		27						27
15945	4.202624		15995	4.203984	27	16045	4.205340	
15946	4.202652	28	15996	4.204011	27	16046	4.205367	27
15947	4.202679	27	15997	4.204038	27	16047	4.205394	27
15948	4.202706	27	15998	4.204066	28	16048	4.205421	27
15949	4.202733	27	15999	4.204093	27	16049	4.205448	27
15950	4.202761	28	16000	4.204120	27	16050	4.205475	27

Nomb.	4.27'30"	D.	Nomb.	4.28'20"	D.	Nomb.	4.29'10"	D.
	Logarith.			Logarith.			Logarith.	
16050	4.205475		16100	4.206826		16150	4.208173	26
16051	4.205502	27	16101	4.206853	27	16151	4.208199	27
16052	4.205529	27	16102	4.206880	27	16152	4.208226	27
16053	4.205556	27	16103	4.206907	27	16153	4.208253	27
16054	4.205583	27	16104	4.206934	27	16154	4.208280	27
16055	4.205610	27	16105	4.206961	27	16155	4.208307	27
16056	4.205637	27	16106	4.206988	27	16156	4.208334	27
16057	4.205664	27	16107	4.207015	27	16157	4.208361	27
16058	4.205691	27	16108	4.207042	27	16158	4.208388	27
16059	4.205718	27	16109	4.207069	27	16159	4.208414	26
16060	4.205746	28	16110	4.207096	27	16160	4.208441	27
16061	4.205773	27	16111	4.207122	26	16161	4.208468	27
16062	4.205800	27	16112	4.207149	27	16162	4.208495	27
16063	4.205827	27	16113	4.207176	27	16163	4.208522	27
16064	4.205854	27	16114	4.207203	27	16164	4.208549	27
16065	4.205881	27	16115	4.207230	27	16165	4.208576	27
16066	4.205908	27	16116	4.207257	27	16166	4.208603	27
16067	4.205935	27	16117	4.207284	27	16167	4.208630	26
16068	4.205962	27	16118	4.207311	27	16168	4.208656	27
16069	4.205989	27	16119	4.207338	27	16169	4.208683	27
16070	4.206016	27	16120	4.207365	27	16170	4.208710	27
16071	4.206043	27	16121	4.207392	27	16171	4.208737	27
16072	4.206070	27	16122	4.207419	27	16172	4.208764	27
16073	4.206097	27	16123	4.207446	27	16173	4.208791	27
16074	4.206124	27	16124	4.207473	27	16174	4.208817	26
16075	4.206151	27	16125	4.207500	27	16175	4.208844	27
16076	4.206178	27	16126	4.207527	27	16176	4.208871	27
16077	4.206205	27	16127	4.207554	27	16177	4.208898	27
16078	4.206232	27	16128	4.207581	27	16178	4.208925	27
16079	4.206259	27	16129	4.207607	26	16179	4.208952	27
16080	4.206286	27	16130	4.207634	27	16180	4.208979	27
16081	4.206313	27	16131	4.207661	27	16181	4.209005	26
16082	4.206340	27	16132	4.207688	27	16182	4.209032	27
16083	4.206367	27	16133	4.207715	27	16183	4.209059	27
16084	4.206394	27	16134	4.207742	27	16184	4.209086	27
16085	4.206421	27	16135	4.207769	27	16185	4.209113	27
16086	4.206448	27	16136	4.207796	27	16186	4.209140	27
16087	4.206475	27	16137	4.207823	27	16187	4.209166	26
16088	4.206502	27	16138	4.207850	27	16188	4.209193	27
16089	4.206529	27	16139	4.207877	27	16189	4.209220	27
16090	4.206556	27	16140	4.207904	27	16190	4.209247	27
16091	4.206583	27	16141	4.207930	26	16191	4.209274	27
16092	4.206610	27	16142	4.207957	27	16192	4.209300	26
16093	4.206637	27	16143	4.207984	27	16193	4.209327	27
16094	4.206664	27	16144	4.208011	27	16194	4.209354	27
16095	4.206691	27	16145	4.208038	27	16195	4.209381	27
16096	4.206718	27	16146	4.208065	27	16196	4.209408	27
16097	4.206745	27	16147	4.208092	27	16197	4.209435	27
16098	4.206772	27	16148	4.208119	27	16198	4.209461	26
16099	4.206799	27	16149	4.208146	27	16199	4.209488	27
16100	4.206826	27	16150	4.208173	27	16200	4.209515	27

Nomb.	4. 30' 0"	D.	Nomb.	4. 30' 50"	D.	Nomb.	4. 31' 40"	D.
16200	4.209515		16250	4.210853		16300	4.212188	
16201	4.209542	27	16251	4.210880	27	16301	4.212214	26
16202	4.209569	27	16252	4.210907	27	16302	4.212241	27
16203	4.209595	26	16253	4.210934	27	16303	4.212268	27
16204	4.209622	27	16254	4.210960	26	16304	4.212294	26
16205	4.209649	27	16255	4.210987	27	16305	4.212321	27
16206	4.209676	27	16256	4.211014	27	16306	4.212347	26
16207	4.209703	27	16257	4.211040	26	16307	4.212374	27
16208	4.209729	26	16258	4.211067	27	16308	4.212401	27
16209	4.209756	27	16259	4.211094	27	16309	4.212427	26
16210	4.209783	27	16260	4.211121	27	16310	4.212454	27
16211	4.209810	27	16261	4.211147	26	16311	4.212481	27
16212	4.209837	27	16262	4.211174	27	16312	4.212507	26
16213	4.209863	26	16263	4.211201	27	16313	4.212534	27
16214	4.209890	27	16264	4.211227	26	16314	4.212560	26
16215	4.209917	27	16265	4.211254	27	16315	4.212587	27
16216	4.209944	27	16266	4.211281	27	16316	4.212614	27
16217	4.209971	27	16267	4.211307	26	16317	4.212640	26
16218	4.209997	26	16268	4.211334	27	16318	4.212667	27
16219	4.210024	27	16269	4.211361	27	16319	4.212694	27
16220	4.210051	27	16270	4.211388	27	16320	4.212720	26
16221	4.210078	27	16271	4.211414	26	16321	4.212747	27
16222	4.210104	26	16272	4.211441	27	16322	4.212773	26
16223	4.210131	27	16273	4.211468	27	16323	4.212800	27
16224	4.210158	27	16274	4.211494	26	16324	4.212827	27
16225	4.210185	27	16275	4.211521	27	16325	4.212853	26
16226	4.210211	26	16276	4.211548	27	16326	4.212880	27
16227	4.210238	27	16277	4.211574	26	16327	4.212906	26
16228	4.210265	27	16278	4.211601	27	16328	4.212933	27
16229	4.210292	27	16279	4.211628	27	16329	4.212960	27
16230	4.210319	27	16280	4.211654	26	16330	4.212986	26
16231	4.210345	26	16281	4.211681	27	16331	4.213013	27
16232	4.210372	27	16282	4.211708	27	16332	4.213039	26
16233	4.210399	27	16283	4.211734	26	16333	4.213066	27
16234	4.210426	27	16284	4.211761	27	16334	4.213093	27
16235	4.210452	26	16285	4.211788	27	16335	4.213119	26
16236	4.210479	27	16286	4.211814	26	16336	4.213146	27
16237	4.210506	27	16287	4.211841	27	16337	4.213172	26
16238	4.210533	27	16288	4.211868	27	16338	4.213199	27
16239	4.210559	26	16289	4.211894	26	16339	4.213225	26
16240	4.210586	27	16290	4.211921	27	16340	4.213252	27
16241	4.210613	27	16291	4.211948	27	16341	4.213279	27
16242	4.210640	26	16292	4.211974	26	16342	4.213305	26
16243	4.210666	27	16293	4.212001	27	16343	4.213332	27
16244	4.210693	27	16294	4.212028	27	16344	4.213358	26
16245	4.210720	27	16295	4.212054	26	16345	4.213385	27
16246	4.210746	26	16296	4.212081	27	16346	4.213411	26
16247	4.210773	27	16297	4.212108	27	16347	4.213438	27
16248	4.210800	27	16298	4.212134	26	16348	4.213465	27
16249	4.210827	27	16299	4.212161	27	16349	4.213491	26
16250	4.210853	26	16300	4.212188	27	16350	4.213518	27

Nomb.	4. 32' 30"	D.	Nomb.	4. 33' 20"	D.	Nomb.	4. 34' 10"	D.
	Logarith.			Logarith.			Logarith.	
16350	4.213518	26	16400	4.214844	26	16450	4.216166	26
16351	4.213544	27	16401	4.214870	27	16451	4.216192	26
16352	4.213571	27	16402	4.214897	27	16452	4.216219	27
16353	4.213597	26	16403	4.214923	26	16453	4.216245	26
16354	4.213624	27	16404	4.214950	27	16454	4.216271	26
16355	4.213650	26	16405	4.214976	26	16455	4.216298	27
16356	4.213677	27	16406	4.215003	27	16456	4.216324	26
16357	4.213704	27	16407	4.215029	26	16457	4.216351	27
16358	4.213730	26	16408	4.215056	27	16458	4.216377	26
16359	4.213757	27	16409	4.215082	26	16459	4.216403	26
16360	4.213783	26	16410	4.215109	27	16460	4.216430	27
16361	4.213810	27	16411	4.215135	26	16461	4.216456	26
16362	4.213836	26	16412	4.215162	27	16462	4.216483	27
16363	4.213863	27	16413	4.215188	26	16463	4.216509	26
16364	4.213889	26	16414	4.215214	26	16464	4.216535	26
16365	4.213916	27	16415	4.215241	27	16465	4.216562	27
16366	4.213943	27	16416	4.215267	26	16466	4.216588	26
16367	4.213969	26	16417	4.215294	27	16467	4.216614	26
16368	4.213996	27	16418	4.215320	26	16468	4.216641	27
16369	4.214022	26	16419	4.215347	27	16469	4.216667	26
16370	4.214049	27	16420	4.215373	26	16470	4.216694	27
16371	4.214075	26	16421	4.215400	27	16471	4.216720	26
16372	4.214102	27	16422	4.215426	26	16472	4.216746	26
16373	4.214128	26	16423	4.215452	26	16473	4.216773	27
16374	4.214155	27	16424	4.215479	27	16474	4.216799	26
16375	4.214181	26	16425	4.215505	26	16475	4.216825	27
16376	4.214208	27	16426	4.215532	27	16476	4.216852	26
16377	4.214234	26	16427	4.215558	26	16477	4.216878	26
16378	4.214261	27	16428	4.215585	27	16478	4.216904	26
16379	4.214287	26	16429	4.215611	26	16479	4.216931	27
16380	4.214314	27	16430	4.215638	27	16480	4.216957	26
16381	4.214340	26	16431	4.215664	26	16481	4.216984	27
16382	4.214367	27	16432	4.215690	27	16482	4.217010	26
16383	4.214393	26	16433	4.215717	27	16483	4.217036	26
16384	4.214420	27	16434	4.215743	26	16484	4.217063	27
16385	4.214446	26	16435	4.215770	27	16485	4.217089	26
16386	4.214473	27	16436	4.215796	26	16486	4.217115	27
16387	4.214499	26	16437	4.215823	27	16487	4.217142	26
16388	4.214526	27	16438	4.215849	26	16488	4.217168	26
16389	4.214552	26	16439	4.215875	26	16489	4.217194	26
16390	4.214579	27	16440	4.215902	27	16490	4.217221	27
16391	4.214605	26	16441	4.215928	26	16491	4.217247	26
16392	4.214632	27	16442	4.215955	27	16492	4.217273	26
16393	4.214658	26	16443	4.215981	26	16493	4.217300	27
16394	4.214685	27	16444	4.216007	26	16494	4.217326	26
16395	4.214711	26	16445	4.216034	27	16495	4.217352	26
16396	4.214738	27	16446	4.216060	26	16496	4.217379	27
16397	4.214764	26	16447	4.216087	27	16497	4.217405	26
16398	4.214791	27	16448	4.216113	26	16498	4.217431	26
16399	4.214817	26	16449	4.216140	27	16499	4.217458	27
16400	4.214844	27	16450	4.216166	26	16500	4.217484	26

Nomb.	4. 35' 0"	D.	Nomb.	4. 35' 50"	D.	Nomb.	4. 36' 40"	D.
16500	4.217484	26	16550	4.218798	26	16600	4.220108	26
16501	4.217510	26	16551	4.218824	26	16601	4.220134	26
16502	4.217537	27	16552	4.218850	26	16602	4.220160	26
16503	4.217563	26	16553	4.218877	27	16603	4.220187	27
16504	4.217589	26	16554	4.218903	26	16604	4.220213	26
16505	4.217616	27	16555	4.218929	26	16605	4.220239	26
16506	4.217642	26	16556	4.218955	26	16606	4.220265	26
16507	4.217668	26	16557	4.218982	27	16607	4.220291	26
16508	4.217694	26	16558	4.219008	26	16608	4.220317	26
16509	4.217721	27	16559	4.219034	26	16609	4.220343	26
16510	4.217747	26	16560	4.219060	26	16610	4.220370	27
16511	4.217773	26	16561	4.219087	27	16611	4.220396	26
16512	4.217800	27	16562	4.219113	26	16612	4.220422	26
16513	4.217826	26	16563	4.219139	26	16613	4.220448	26
16514	4.217852	26	16564	4.219165	26	16614	4.220474	26
16515	4.217879	27	16565	4.219191	26	16615	4.220500	26
16516	4.217905	26	16566	4.219218	27	16616	4.220526	26
16517	4.217931	26	16567	4.219244	26	16617	4.220553	27
16518	4.217957	26	16568	4.219270	26	16618	4.220579	26
16519	4.217984	27	16569	4.219296	26	16619	4.220605	26
16520	4.218010	26	16570	4.219323	27	16620	4.220631	26
16521	4.218036	26	16571	4.219349	26	16621	4.220657	26
16522	4.218063	27	16572	4.219375	26	16622	4.220683	26
16523	4.218089	26	16573	4.219401	26	16623	4.220709	26
16524	4.218115	26	16574	4.219427	26	16624	4.220736	27
16525	4.218141	26	16575	4.219454	27	16625	4.220762	26
16526	4.218168	27	16576	4.219480	26	16626	4.220788	26
16527	4.218194	26	16577	4.219506	26	16627	4.220814	26
16528	4.218220	26	16578	4.219532	26	16628	4.220840	26
16529	4.218247	27	16579	4.219558	26	16629	4.220866	26
16530	4.218273	26	16580	4.219585	27	16630	4.220892	26
16531	4.218299	26	16581	4.219611	26	16631	4.220918	26
16532	4.218325	26	16582	4.219637	26	16632	4.220944	26
16533	4.218352	27	16583	4.219663	26	16633	4.220971	27
16534	4.218378	26	16584	4.219689	26	16634	4.220997	26
16535	4.218404	26	16585	4.219715	26	16635	4.221023	26
16536	4.218430	26	16586	4.219742	27	16636	4.221049	26
16537	4.218457	27	16587	4.219768	26	16637	4.221075	26
16538	4.218483	26	16588	4.219794	26	16638	4.221101	26
16539	4.218509	26	16589	4.219820	26	16639	4.221127	26
16540	4.218536	27	16590	4.219846	26	16640	4.221153	26
16541	4.218562	26	16591	4.219873	27	16641	4.221179	27
16542	4.218588	26	16592	4.219899	26	16642	4.221206	26
16543	4.218614	26	16593	4.219925	26	16643	4.221232	26
16544	4.218641	27	16594	4.219951	26	16644	4.221258	26
16545	4.218667	26	16595	4.219977	26	16645	4.221284	26
16546	4.218693	26	16596	4.220003	26	16646	4.221310	26
16547	4.218719	26	16597	4.220030	27	16647	4.221336	26
16548	4.218746	27	16598	4.220056	26	16648	4.221362	26
16549	4.218772	26	16599	4.220082	26	16649	4.221388	26
16550	4.218798	26	16600	4.220108	26	16650	4.221414	26

Nomb.	4. 37. 30"	D.	Nomb.	4. 38' 20"	D.	Nomb.	4. 39' 10"	D.
	Logarith.			Logarith.			Logarith.	
16650	4.221414		16700	4.222716		16750	4.224015	
16651	4.221440	26	16701	4.222742	26	16751	4.224041	26
16652	4.221466	26	16702	4.222768	26	16752	4.224067	26
16653	4.221492	26	16703	4.222794	26	16753	4.224093	26
16654	4.221519	27	16704	4.222820	26	16754	4.224119	26
16655	4.221545	26	16705	4.222846	26	16755	4.224144	25
16656	4.221571	26	16706	4.222872	26	16756	4.224170	26
16657	4.221597	26	16707	4.222898	26	16757	4.224196	26
16658	4.221623	26	16708	4.222924	26	16758	4.224222	26
16659	4.221649	26	16709	4.222950	26	16759	4.224248	26
16660	4.221675	26	16710	4.222976	26	16760	4.224274	26
16661	4.221701	26	16711	4.223002	26	16761	4.224300	26
16662	4.221727	26	16712	4.223028	26	16762	4.224326	26
16663	4.221753	26	16713	4.223054	26	16763	4.224352	26
16664	4.221779	26	16714	4.223080	26	16764	4.224378	26
16665	4.221805	26	16715	4.223106	26	16765	4.224404	26
16666	4.221831	26	16716	4.223132	26	16766	4.224430	25
16667	4.221857	26	16717	4.223158	26	16767	4.224455	26
16668	4.221883	26	16718	4.223184	26	16768	4.224481	26
16669	4.221910	27	16719	4.223210	26	16769	4.224507	26
16670	4.221936	26	16720	4.223236	26	16770	4.224533	26
16671	4.221962	26	16721	4.223262	26	16771	4.224559	26
16672	4.221988	26	16722	4.223288	26	16772	4.224585	26
16673	4.222014	26	16723	4.223314	26	16773	4.224611	26
16674	4.222040	26	16724	4.223340	26	16774	4.224637	26
16675	4.222066	26	16725	4.223366	26	16775	4.224663	26
16676	4.222092	26	16726	4.223392	26	16776	4.224688	25
16677	4.222118	26	16727	4.223418	26	16777	4.224714	26
16678	4.222144	26	16728	4.223444	26	16778	4.224740	26
16679	4.222170	26	16729	4.223470	26	16779	4.224766	26
16680	4.222196	26	16730	4.223496	26	16780	4.224792	26
16681	4.222222	26	16731	4.223522	26	16781	4.224818	26
16682	4.222248	26	16732	4.223548	26	16782	4.224844	26
16683	4.222274	26	16733	4.223574	26	16783	4.224870	26
16684	4.222300	26	16734	4.223600	26	16784	4.224895	25
16685	4.222326	26	16735	4.223626	26	16785	4.224921	26
16686	4.222352	26	16736	4.223652	26	16786	4.224947	26
16687	4.222378	26	16737	4.223678	26	16787	4.224973	26
16688	4.222404	26	16738	4.223704	26	16788	4.224999	26
16689	4.222430	26	16739	4.223730	26	16789	4.225025	26
16690	4.222456	26	16740	4.223755	25	16790	4.225051	26
16691	4.222482	26	16741	4.223781	26	16791	4.225077	26
16692	4.222508	26	16742	4.223807	26	16792	4.225102	25
16693	4.222534	26	16743	4.223833	26	16793	4.225128	26
16694	4.222560	26	16744	4.223859	26	16794	4.225154	26
16695	4.222586	26	16745	4.223885	26	16795	4.225180	26
16696	4.222612	26	16746	4.223911	26	16796	4.225206	26
16697	4.222638	26	16747	4.223937	26	16797	4.225232	26
16698	4.222664	26	16748	4.223963	26	16798	4.225258	26
16699	4.222690	26	16749	4.223989	26	16799	4.225283	25
16700	4.222716	26	16750	4.224015	26	16800	4.225309	26

Nomb.	4 40' 0"	D.	Nomb.	4 40' 50"	D.	Nomb.	4 41' 40"	D.
Logarith.			Logarith.			Logarith.		
16800	4.225309	26	16850	4.226600	26	16900	4.227887	25
16801	4.225335	26	16851	4.226626	26	16901	4.227912	25
16802	4.225361	26	16852	4.226651	25	16902	4.227938	26
16803	4.225387	26	16853	4.226677	26	16903	4.227964	26
16804	4.225413	26	16854	4.226703	26	16904	4.227989	25
16805	4.225439	26	16855	4.226729	26	16905	4.228015	26
16806	4.225464	25	16856	4.226755	26	16906	4.228041	26
16807	4.225490	26	16857	4.226780	25	16907	4.228067	26
16808	4.225516	26	16858	4.226806	26	16908	4.228092	25
16809	4.225542	26	16859	4.226832	26	16909	4.228118	26
16810	4.225568	26	16860	4.226858	26	16910	4.228144	26
16811	4.225594	25	16861	4.226883	25	16911	4.228169	25
16812	4.225619	25	16862	4.226909	26	16912	4.228195	26
16813	4.225645	26	16863	4.226935	26	16913	4.228221	26
16814	4.225671	26	16864	4.226961	26	16914	4.228246	25
16815	4.225697	26	16865	4.226986	25	16915	4.228272	26
16816	4.225723	26	16866	4.227012	26	16916	4.228298	26
16817	4.225749	26	16867	4.227038	26	16917	4.228323	25
16818	4.225774	25	16868	4.227064	26	16918	4.228349	26
16819	4.225800	26	16869	4.227089	25	16919	4.228375	26
16820	4.225826	26	16870	4.227115	26	16920	4.228400	25
16821	4.225852	26	16871	4.227141	26	16921	4.228426	26
16822	4.225878	26	16872	4.227167	26	16922	4.228452	26
16823	4.225903	25	16873	4.227192	25	16923	4.228477	25
16824	4.225929	26	16874	4.227218	26	16924	4.228503	26
16825	4.225955	26	16875	4.227244	26	16925	4.228529	26
16826	4.225981	26	16876	4.227270	26	16926	4.228554	25
16827	4.226007	26	16877	4.227295	25	16927	4.228580	26
16828	4.226033	26	16878	4.227321	26	16928	4.228606	26
16829	4.226058	25	16879	4.227347	26	16929	4.228631	25
16830	4.226084	26	16880	4.227372	25	16930	4.228657	26
16831	4.226110	26	16881	4.227398	26	16931	4.228683	26
16832	4.226136	26	16882	4.227424	26	16932	4.228708	25
16833	4.226162	26	16883	4.227450	26	16933	4.228734	26
16834	4.226187	25	16884	4.227475	25	16934	4.228760	26
16835	4.226213	26	16885	4.227501	26	16935	4.228785	25
16836	4.226239	26	16886	4.227527	26	16936	4.228811	26
16837	4.226265	26	16887	4.227553	26	16937	4.228836	25
16838	4.226291	26	16888	4.227578	25	16938	4.228862	26
16839	4.226316	25	16889	4.227604	26	16939	4.228888	26
16840	4.226342	26	16890	4.227630	26	16940	4.228913	25
16841	4.226368	26	16891	4.227655	25	16941	4.228939	26
16842	4.226394	26	16892	4.227681	26	16942	4.228965	26
16843	4.226419	25	16893	4.227707	26	16943	4.228990	25
16844	4.226445	26	16894	4.227732	25	16944	4.229016	26
16845	4.226471	26	16895	4.227758	26	16945	4.229042	26
16846	4.226497	26	16896	4.227784	26	16946	4.229067	25
16847	4.226523	26	16897	4.227810	26	16947	4.229093	26
16848	4.226548	25	16898	4.227835	25	16948	4.229118	25
16849	4.226574	26	16899	4.227861	26	16949	4.229144	26
16850	4.226600	26	16900	4.227887	26	16950	4.229170	26

Nomb.	4. 42' 30"	D.	Nomb.	4. 43' 20"	D.	Nomb.	4. 44' 10"	D.
16950	4.229170		17000	4.230449		17050	4.231724	26
16951	4.229195	25	17001	4.230474	25	17051	4.231750	25
16952	4.229221	26	17002	4.230500	26	17052	4.231775	26
16953	4.229247	26	17003	4.230526	26	17053	4.231801	26
16954	4.229272	25	17004	4.230551	25	17054	4.231826	25
		26			26			26
16955	4.229298	25	17005	4.230577	25	17055	4.231852	25
16956	4.229323	26	17006	4.230602	26	17056	4.231877	26
16957	4.229349	26	17007	4.230628	25	17057	4.231903	25
16958	4.229375	25	17008	4.230653	26	17058	4.231928	26
16959	4.229400	26	17009	4.230679	25	17059	4.231954	25
		26			26			25
16960	4.229426	25	17010	4.230704	26	17060	4.231979	25
16961	4.229451	26	17011	4.230730	25	17061	4.232004	26
16962	4.229477	26	17012	4.230755	26	17062	4.232030	25
16963	4.229502	25	17013	4.230781	25	17063	4.232055	26
16964	4.229528	26	17014	4.230806	26	17064	4.232081	25
		26			26			26
16965	4.229554	25	17015	4.230832	25	17065	4.232106	26
16966	4.229579	26	17016	4.230857	26	17066	4.232132	25
16967	4.229605	26	17017	4.230883	26	17067	4.232157	26
16968	4.229631	25	17018	4.230909	25	17068	4.232183	25
16969	4.229656	26	17019	4.230934	26	17069	4.232208	26
		26			26			25
16970	4.229682	25	17020	4.230960	25	17070	4.232234	25
16971	4.229707	26	17021	4.230985	26	17071	4.232259	25
16972	4.229733	26	17022	4.231011	25	17072	4.232284	26
16973	4.229759	25	17023	4.231036	26	17073	4.232310	25
16974	4.229784	26	17024	4.231062	25	17074	4.232335	26
		26			26			25
16975	4.229810	25	17025	4.231087	26	17075	4.232361	25
16976	4.229835	26	17026	4.231113	25	17076	4.232386	26
16977	4.229861	26	17027	4.231138	26	17077	4.232412	25
16978	4.229887	25	17028	4.231164	25	17078	4.232437	25
16979	4.229912	26	17029	4.231189	26	17079	4.232462	26
		26			26			25
16980	4.229938	25	17030	4.231215	25	17080	4.232488	25
16981	4.229963	26	17031	4.231240	26	17081	4.232513	26
16982	4.229989	25	17032	4.231266	25	17082	4.232539	25
16983	4.230014	26	17033	4.231291	26	17083	4.232564	26
16984	4.230040	26	17034	4.231317	25	17084	4.232590	25
		25			26			25
16985	4.230066	25	17035	4.231342	26	17085	4.232615	25
16986	4.230091	26	17036	4.231368	25	17086	4.232640	26
16987	4.230117	25	17037	4.231393	26	17087	4.232666	25
16988	4.230142	26	17038	4.231419	25	17088	4.232691	26
16989	4.230168	25	17039	4.231444	26	17089	4.232717	25
		26			26			25
16990	4.230193	26	17040	4.231470	25	17090	4.232742	25
16991	4.230219	25	17041	4.231495	26	17091	4.232767	26
16992	4.230244	26	17042	4.231521	25	17092	4.232793	25
16993	4.230270	26	17043	4.231546	26	17093	4.232818	26
16994	4.230296	25	17044	4.231572	25	17094	4.232844	25
		26			25			26
16995	4.230321	26	17045	4.231597	25	17095	4.232869	26
16996	4.230347	25	17046	4.231622	26	17096	4.232895	25
16997	4.230372	26	17047	4.231648	25	17097	4.232920	25
16998	4.230398	25	17048	4.231673	26	17098	4.232945	26
16999	4.230423	26	17049	4.231699	25	17099	4.232971	25
17000	4.230449		17050	4.231724		17100	4.232996	

Nomb.	4. 45' 0"	D.	Nomb.	4. 45' 50"	D.	Nomb.	4. 46' 40"	D.
	Logarith.			Logarith.			Logarith.	
17100	4.232996	26	17150	4.234264	25	17200	4.235528	26
17101	4.233022	25	17151	4.234289	26	17201	4.235554	25
17102	4.233047	25	17152	4.234315	25	17202	4.235579	25
17103	4.233072	26	17153	4.234340	25	17203	4.235604	25
17104	4.233098	25	17154	4.234365	26	17204	4.235629	26
17105	4.233123	25	17155	4.234391	25	17205	4.235655	25
17106	4.233148	26	17156	4.234416	25	17206	4.235680	25
17107	4.233174	25	17157	4.234441	26	17207	4.235705	25
17108	4.233199	25	17158	4.234467	25	17208	4.235730	26
17109	4.233225	26	17159	4.234492	25	17209	4.235756	25
17110	4.233250	25	17160	4.234517	26	17210	4.235781	25
17111	4.233275	26	17161	4.234543	25	17211	4.235806	25
17112	4.233301	25	17162	4.234568	25	17212	4.235831	26
17113	4.233326	26	17163	4.234593	26	17213	4.235857	25
17114	4.233352	25	17164	4.234619	25	17214	4.235882	25
17115	4.233377	25	17165	4.234644	25	17215	4.235907	25
17116	4.233402	26	17166	4.234669	25	17216	4.235932	25
17117	4.233428	25	17167	4.234694	26	17217	4.235957	26
17118	4.233453	25	17168	4.234720	25	17218	4.235983	25
17119	4.233478	26	17169	4.234745	25	17219	4.236008	25
17120	4.233504	25	17170	4.234770	26	17220	4.236033	25
17121	4.233529	25	17171	4.234796	25	17221	4.236058	26
17122	4.233554	26	17172	4.234821	25	17222	4.236084	25
17123	4.233580	25	17173	4.234846	25	17223	4.236109	25
17124	4.233605	26	17174	4.234871	26	17224	4.236134	25
17125	4.233631	25	17175	4.234897	25	17225	4.236159	25
17126	4.233656	25	17176	4.234922	25	17226	4.236184	26
17127	4.233681	25	17177	4.234947	26	17227	4.236210	25
17128	4.233707	26	17178	4.234973	25	17228	4.236235	25
17129	4.233732	25	17179	4.234998	25	17229	4.236260	25
17130	4.233757	26	17180	4.235023	25	17230	4.236285	25
17131	4.233783	25	17181	4.235048	26	17231	4.236310	26
17132	4.233808	25	17182	4.235074	25	17232	4.236336	25
17133	4.233833	26	17183	4.235099	25	17233	4.236361	25
17134	4.233859	25	17184	4.235124	26	17234	4.236386	25
17135	4.233884	25	17185	4.235150	25	17235	4.236411	25
17136	4.233909	26	17186	4.235175	25	17236	4.236436	26
17137	4.233935	25	17187	4.235200	25	17237	4.236462	25
17138	4.233960	25	17188	4.235225	26	17238	4.236487	25
17139	4.233985	26	17189	4.235251	25	17239	4.236512	25
17140	4.234011	25	17190	4.235276	25	17240	4.236537	25
17141	4.234036	25	17191	4.235301	25	17241	4.236562	26
17142	4.234061	26	17192	4.235326	26	17242	4.236588	25
17143	4.234087	25	17193	4.235352	25	17243	4.236613	25
17144	4.234112	25	17194	4.235377	25	17244	4.236638	25
17145	4.234137	26	17195	4.235402	25	17245	4.236663	25
17146	4.234163	25	17196	4.235427	26	17246	4.236688	26
17147	4.234188	25	17197	4.235453	25	17247	4.236714	25
17148	4.234213	26	17198	4.235478	25	17248	4.236739	25
17149	4.234239	25	17199	4.235503	25	17249	4.236764	25
17150	4.234264	25	17200	4.235528	25	17250	4.236789	25

Nomb.	4 47' 30"	D.	Nomb.	4 48' 20"	D.	Nomb.	4 49' 10"	D.
	Logarith.			Logarith.			Logarith.	
17250	4.236789	25	17300	4.238046	25	17350	4.239299	25
17251	4.236814	25	17301	4.238071	25	17351	4.239324	25
17252	4.236839	25	17302	4.238096	25	17352	4.239349	25
17253	4.236865	26	17303	4.238121	25	17353	4.239375	26
17254	4.236890	25	17304	4.238147	26	17354	4.239400	25
17255	4.236915	25	17305	4.238172	25	17355	4.239425	25
17256	4.236940	25	17306	4.238197	25	17356	4.239450	25
17257	4.236965	25	17307	4.238222	25	17357	4.239475	25
17258	4.236990	26	17308	4.238247	25	17358	4.239500	25
17259	4.237016	25	17309	4.238272	25	17359	4.239525	25
17260	4.237041	25	17310	4.238297	25	17360	4.239550	25
17261	4.237066	25	17311	4.238322	25	17361	4.239575	25
17262	4.237091	25	17312	4.238347	25	17362	4.239600	25
17263	4.237116	25	17313	4.238372	25	17363	4.239625	25
17264	4.237141	25	17314	4.238397	25	17364	4.239650	25
17265	4.237167	26	17315	4.238422	25	17365	4.239675	25
17266	4.237192	25	17316	4.238448	26	17366	4.239700	25
17267	4.237217	25	17317	4.238473	25	17367	4.239725	25
17268	4.237242	25	17318	4.238498	25	17368	4.239750	25
17269	4.237267	25	17319	4.238523	25	17369	4.239775	25
17270	4.237292	25	17320	4.238548	25	17370	4.239800	25
17271	4.237317	25	17321	4.238573	25	17371	4.239825	25
17272	4.237343	26	17322	4.238598	25	17372	4.239850	25
17273	4.237368	25	17323	4.238623	25	17373	4.239875	25
17274	4.237393	25	17324	4.238648	25	17374	4.239900	25
17275	4.237418	25	17325	4.238673	25	17375	4.239925	25
17276	4.237443	25	17326	4.238698	25	17376	4.239950	25
17277	4.237468	25	17327	4.238723	25	17377	4.239975	25
17278	4.237493	25	17328	4.238748	25	17378	4.240000	25
17279	4.237519	26	17329	4.238773	25	17379	4.240025	25
17280	4.237544	25	17330	4.238799	26	17380	4.240050	25
17281	4.237569	25	17331	4.238824	25	17381	4.240075	25
17282	4.237594	25	17332	4.238849	25	17382	4.240100	25
17283	4.237619	25	17333	4.238874	25	17383	4.240125	25
17284	4.237644	25	17334	4.238899	25	17384	4.240150	25
17285	4.237669	25	17335	4.238924	25	17385	4.240175	25
17286	4.237694	25	17336	4.238949	25	17386	4.240200	25
17287	4.237720	26	17337	4.238974	25	17387	4.240225	25
17288	4.237745	25	17338	4.238999	25	17388	4.240250	25
17289	4.237770	25	17339	4.239024	25	17389	4.240275	25
17290	4.237795	25	17340	4.239049	25	17390	4.240300	25
17291	4.237820	25	17341	4.239074	25	17391	4.240325	25
17292	4.237845	25	17342	4.239099	25	17392	4.240350	25
17293	4.237870	25	17343	4.239124	25	17393	4.240374	24
17294	4.237895	25	17344	4.239149	25	17394	4.240399	25
17295	4.237921	26	17345	4.239174	25	17395	4.240424	25
17296	4.237946	25	17346	4.239199	25	17396	4.240449	25
17297	4.237971	25	17347	4.239224	25	17397	4.240474	25
17298	4.237996	25	17348	4.239249	25	17398	4.240499	25
17299	4.238021	25	17349	4.239274	25	17399	4.240524	25
17300	4.238046	25	17350	4.239299	25	17400	4.240549	25

Nomb.	4. 50' 0"	D.	Nomb.	4. 50' 50"	D.	Nomb.	4. 51' 40"	D.
	Logarith.			Logarith.			Logarith.	
17400	4.240549	25	17450	4.241795	25	17500	4.243038	25
17401	4.240574	25	17451	4.241820	25	17501	4.243063	25
17402	4.240599	25	17452	4.241845	25	17502	4.243088	24
17403	4.240624	25	17453	4.241870	25	17503	4.243112	25
17404	4.240649	25	17454	4.241895	25	17504	4.243137	25
17405	4.240674	25	17455	4.241920	25	17505	4.243162	25
17406	4.240699	25	17456	4.241945	25	17506	4.243187	25
17407	4.240724	25	17457	4.241970	24	17507	4.243212	25
17408	4.240749	25	17458	4.241994	25	17508	4.243237	25
17409	4.240774	25	17459	4.242019	25	17509	4.243262	24
17410	4.240799	25	17460	4.242044	25	17510	4.243286	25
17411	4.240824	25	17461	4.242069	25	17511	4.243311	25
17412	4.240849	25	17462	4.242094	25	17512	4.243336	24
17413	4.240874	24	17463	4.242119	25	17513	4.243360	25
17414	4.240898	25	17464	4.242144	25	17514	4.243385	25
17415	4.240923	25	17465	4.242169	24	17515	4.243410	25
17416	4.240948	25	17466	4.242193	25	17516	4.243435	25
17417	4.240973	25	17467	4.242218	25	17517	4.243460	24
17418	4.240998	25	17468	4.242243	25	17518	4.243484	25
17419	4.241023	25	17469	4.242268	25	17519	4.243509	25
17420	4.241048	25	17470	4.242293	25	17520	4.243534	25
17421	4.241073	25	17471	4.242318	25	17521	4.243559	25
17422	4.241098	25	17472	4.242343	24	17522	4.243584	24
17423	4.241123	25	17473	4.242367	25	17523	4.243608	25
17424	4.241148	25	17474	4.242392	25	17524	4.243633	25
17425	4.241173	25	17475	4.242417	25	17525	4.243658	25
17426	4.241198	25	17476	4.242442	25	17526	4.243683	25
17427	4.241223	25	17477	4.242467	25	17527	4.243708	24
17428	4.241248	25	17478	4.242492	25	17528	4.243732	25
17429	4.241272	24	17479	4.242517	24	17529	4.243757	25
17430	4.241297	25	17480	4.242541	25	17530	4.243782	25
17431	4.241322	25	17481	4.242566	25	17531	4.243807	25
17432	4.241347	25	17482	4.242591	25	17532	4.243831	24
17433	4.241372	25	17483	4.242616	25	17533	4.243856	25
17434	4.241397	25	17484	4.242641	25	17534	4.243881	25
17435	4.241422	25	17485	4.242666	25	17535	4.243906	25
17436	4.241447	25	17486	4.242690	24	17536	4.243931	25
17437	4.241472	25	17487	4.242715	25	17537	4.243955	24
17438	4.241497	25	17488	4.242740	25	17538	4.243980	25
17439	4.241522	25	17489	4.242765	25	17539	4.244005	25
17440	4.241546	24	17490	4.242790	25	17540	4.244030	25
17441	4.241571	25	17491	4.242815	25	17541	4.244054	24
17442	4.241596	25	17492	4.242839	24	17542	4.244079	25
17443	4.241621	25	17493	4.242864	25	17543	4.244104	25
17444	4.241646	25	17494	4.242889	25	17544	4.244129	25
17445	4.241671	25	17495	4.242914	25	17545	4.244153	24
17446	4.241696	25	17496	4.242939	25	17546	4.244178	25
17447	4.241721	25	17497	4.242964	25	17547	4.244203	25
17448	4.241746	25	17498	4.242988	24	17548	4.244228	25
17449	4.241771	25	17499	4.243013	25	17549	4.244252	24
17450	4.241795	24	17500	4.243038	25	17550	4.244277	25

Nomb.	4. 52' 30"	D.	Nomb.	4. 53' 20"	D.	Nomb.	4. 54' 10"	D.
	Logarith.			Logarith.			Logarith.	
17550	4.244277	25	17600	4.245513	24	17650	4.246745	24
17551	4.244302	25	17601	4.245537	25	17651	4.246769	25
17552	4.244327	24	17602	4.245562	25	17652	4.246794	24
17553	4.244351	24	17603	4.245587	24	17653	4.246818	25
17554	4.244376	25	17604	4.245611	25	17654	4.246843	25
17555	4.244401	25	17605	4.245636	25	17655	4.246868	24
17556	4.244426	24	17606	4.245661	24	17656	4.246892	25
17557	4.244450	25	17607	4.245685	25	17657	4.246917	24
17558	4.244475	25	17608	4.245710	25	17658	4.246941	25
17559	4.244500	24	17609	4.245735	24	17659	4.246966	25
17560	4.244524	25	17610	4.245759	25	17660	4.246991	24
17561	4.244549	25	17611	4.245784	25	17661	4.247015	25
17562	4.244574	25	17612	4.245809	24	17662	4.247040	24
17563	4.244599	24	17613	4.245833	25	17663	4.247064	25
17564	4.244623	25	17614	4.245858	25	17664	4.247089	25
17565	4.244648	25	17615	4.245883	24	17665	4.247114	24
17566	4.244673	25	17616	4.245907	25	17666	4.247138	25
17567	4.244698	24	17617	4.245932	25	17667	4.247163	24
17568	4.244722	25	17618	4.245957	24	17668	4.247187	25
17569	4.244747	25	17619	4.245981	25	17669	4.247212	24
17570	4.244772	24	17620	4.246006	25	17670	4.247236	25
17571	4.244796	25	17621	4.246031	24	17671	4.247261	25
17572	4.244821	25	17622	4.246055	25	17672	4.247286	24
17573	4.244846	25	17623	4.246080	24	17673	4.247310	25
17574	4.244871	24	17624	4.246104	25	17674	4.247335	24
17575	4.244895	25	17625	4.246129	25	17675	4.247359	25
17576	4.244920	25	17626	4.246154	24	17676	4.247384	25
17577	4.244945	24	17627	4.246178	25	17677	4.247409	24
17578	4.244969	25	17628	4.246203	25	17678	4.247433	25
17579	4.244994	25	17629	4.246228	24	17679	4.247458	24
17580	4.245019	25	17630	4.246252	25	17680	4.247482	25
17581	4.245044	24	17631	4.246277	25	17681	4.247507	24
17582	4.245068	25	17632	4.246302	24	17682	4.247531	25
17583	4.245093	25	17633	4.246326	25	17683	4.247556	24
17584	4.245118	24	17634	4.246351	24	17684	4.247580	25
17585	4.245142	25	17635	4.246375	25	17685	4.247605	25
17586	4.245167	25	17636	4.246400	25	17686	4.247630	24
17587	4.245192	24	17637	4.246425	25	17687	4.247654	25
17588	4.245216	25	17638	4.246449	24	17688	4.247679	24
17589	4.245241	25	17639	4.246474	25	17689	4.247703	25
17590	4.245266	24	17640	4.246499	24	17690	4.247728	24
17591	4.245290	25	17641	4.246523	25	17691	4.247752	25
17592	4.245315	25	17642	4.246548	24	17692	4.247777	24
17593	4.245340	25	17643	4.246572	25	17693	4.247801	25
17594	4.245365	24	17644	4.246597	25	17694	4.247826	25
17595	4.245389	25	17645	4.246622	24	17695	4.247851	24
17596	4.245414	25	17646	4.246646	25	17696	4.247875	25
17597	4.245439	24	17647	4.246671	24	17697	4.247900	24
17598	4.245463	25	17648	4.246695	25	17698	4.247924	25
17599	4.245488	25	17649	4.246720	25	17699	4.247949	24
17600	4.245513		17650	4.246745		17700	4.247973	

Nomb.	4. 55' 0"	D.	Nomb.	4. 55' 50"	D.	Nomb.	4. 56' 40"	D.
Logarith.			Logarith.			Logarith.		
17700	4.247973	25	17750	4.249198		17800	4.250420	24
17701	4.247998	24	17751	4.249223	25	17801	4.250444	25
17702	4.248022	24	17752	4.249247	24	17802	4.250469	24
17703	4.248047	25	17753	4.249272	25	17803	4.250493	24
17704	4.248071	24	17754	4.249296	24	17804	4.250518	25
		25			25			24
17705	4.248096	24	17755	4.249321	24	17805	4.250542	25
17706	4.248120	25	17756	4.249345	24	17806	4.250566	24
17707	4.248145	24	17757	4.249370	25	17807	4.250591	24
17708	4.248169	24	17758	4.249394	24	17808	4.250615	24
17709	4.248194	25	17759	4.249418	24	17809	4.250639	24
		25			25			25
17710	4.248219	24	17760	4.249443	24	17810	4.250664	24
17711	4.248243	25	17761	4.249467	24	17811	4.250688	25
17712	4.248268	24	17762	4.249492	25	17812	4.250713	24
17713	4.248292	25	17763	4.249516	24	17813	4.250737	24
17714	4.248317	24	17764	4.249541	25	17814	4.250761	24
		24			24			25
17715	4.248341	25	17765	4.249565	25	17815	4.250786	24
17716	4.248366	24	17766	4.249590	24	17816	4.250810	25
17717	4.248390	25	17767	4.249614	24	17817	4.250835	24
17718	4.248415	24	17768	4.249638	25	17818	4.250859	24
17719	4.248439	25	17769	4.249663	24	17819	4.250883	25
		24			25			24
17720	4.248464	24	17770	4.249687	24	17820	4.250908	24
17721	4.248488	25	17771	4.249712	24	17821	4.250932	24
17722	4.248513	24	17772	4.249736	25	17822	4.250956	24
17723	4.248537	25	17773	4.249761	24	17823	4.250981	25
17724	4.248562	24	17774	4.249785	24	17824	4.251005	24
		24			25			24
17725	4.248586	25	17775	4.249810	24	17825	4.251029	25
17726	4.248611	24	17776	4.249834	24	17826	4.251054	24
17727	4.248635	25	17777	4.249858	25	17827	4.251078	24
17728	4.248660	24	17778	4.249883	24	17828	4.251103	25
17729	4.248684	25	17779	4.249907	24	17829	4.251127	24
		24			25			24
17730	4.248709	24	17780	4.249932	24	17830	4.251151	25
17731	4.248733	25	17781	4.249956	25	17831	4.251176	24
17732	4.248758	24	17782	4.249981	24	17832	4.251200	24
17733	4.248782	25	17783	4.250005	24	17833	4.251224	24
17734	4.248807	24	17784	4.250029	24	17834	4.251249	25
		24			25			24
17735	4.248831	25	17785	4.250054	24	17835	4.251273	24
17736	4.248856	24	17786	4.250078	25	17836	4.251297	25
17737	4.248880	25	17787	4.250103	24	17837	4.251322	24
17738	4.248905	24	17788	4.250127	24	17838	4.251346	24
17739	4.248929	25	17789	4.250151	24	17839	4.251370	24
		24			25			25
17740	4.248954	24	17790	4.250176	24	17840	4.251395	24
17741	4.248978	25	17791	4.250200	25	17841	4.251419	24
17742	4.249003	24	17792	4.250225	24	17842	4.251443	25
17743	4.249027	24	17793	4.250249	25	17843	4.251468	24
17744	4.249051	25	17794	4.250274	24	17844	4.251492	25
		24			24			24
17745	4.249076	25	17795	4.250298	24	17845	4.251517	24
17746	4.249100	24	17796	4.250322	25	17846	4.251541	24
17747	4.249125	24	17797	4.250347	24	17847	4.251565	25
17748	4.249149	25	17798	4.250371	25	17848	4.251590	24
17749	4.249174	24	17799	4.250396	24	17849	4.251614	24
17750	4.249198	24	17800	4.250420	24	17850	4.251638	24

Nomb.	4. 57' 30"	D.	Nomb.	4. 58' 20"	D.	Nomb.	4. 59' 10"	D.
17850	4.251638	25	17900	4.252853	24	17950	4.254064	25
17851	4.251663	24	17901	4.252877	25	17951	4.254089	24
17852	4.251687	24	17902	4.252902	24	17952	4.254113	24
17853	4.251711	24	17903	4.252926	24	17953	4.254137	24
17854	4.251735	24	17904	4.252950	24	17954	4.254161	24
17855	4.251760	25	17905	4.252974	24	17955	4.254185	24
17856	4.251784	24	17906	4.252999	25	17956	4.254210	25
17857	4.251808	24	17907	4.253023	24	17957	4.254234	24
17858	4.251833	25	17908	4.253047	24	17958	4.254258	24
17859	4.251857	24	17909	4.253071	25	17959	4.254282	24
17860	4.251881	24	17910	4.253096	24	17960	4.254306	24
17861	4.251906	25	17911	4.253120	24	17961	4.254330	24
17862	4.251930	24	17912	4.253144	24	17962	4.254355	25
17863	4.251954	24	17913	4.253168	24	17963	4.254379	24
17864	4.251979	25	17914	4.253193	25	17964	4.254403	24
17865	4.252003	24	17915	4.253217	24	17965	4.254427	24
17866	4.252027	24	17916	4.253241	24	17966	4.254451	24
17867	4.252052	25	17917	4.253265	24	17967	4.254476	25
17868	4.252076	24	17918	4.253289	24	17968	4.254500	24
17869	4.252100	24	17919	4.253314	25	17969	4.254524	24
17870	4.252125	25	17920	4.253338	24	17970	4.254548	24
17871	4.252149	24	17921	4.253362	24	17971	4.254572	24
17872	4.252173	24	17922	4.253386	24	17972	4.254596	24
17873	4.252197	24	17923	4.253411	25	17973	4.254621	25
17874	4.252222	25	17924	4.253435	24	17974	4.254645	24
17875	4.252246	24	17925	4.253459	24	17975	4.254669	24
17876	4.252270	24	17926	4.253483	25	17976	4.254693	24
17877	4.252295	25	17927	4.253508	24	17977	4.254717	24
17878	4.252319	24	17928	4.253532	24	17978	4.254741	24
17879	4.252343	24	17929	4.253556	24	17979	4.254765	24
17880	4.252367	25	17930	4.253580	24	17980	4.254790	25
17881	4.252392	24	17931	4.253604	24	17981	4.254814	24
17882	4.252416	24	17932	4.253629	25	17982	4.254838	24
17883	4.252440	24	17933	4.253653	24	17983	4.254862	24
17884	4.252465	25	17934	4.253677	24	17984	4.254886	24
17885	4.252489	24	17935	4.253701	24	17985	4.254910	24
17886	4.252513	24	17936	4.253726	25	17986	4.254935	25
17887	4.252537	24	17937	4.253750	24	17987	4.254959	24
17888	4.252562	25	17938	4.253774	24	17988	4.254983	24
17889	4.252586	24	17939	4.253798	24	17989	4.255007	24
17890	4.252610	24	17940	4.253822	25	17990	4.255031	24
17891	4.252635	25	17941	4.253847	24	17991	4.255055	24
17892	4.252659	24	17942	4.253871	24	17992	4.255079	24
17893	4.252683	24	17943	4.253895	24	17993	4.255104	25
17894	4.252707	24	17944	4.253919	24	17994	4.255128	24
17895	4.252732	25	17945	4.253943	24	17995	4.255152	24
17896	4.252756	24	17946	4.253968	25	17996	4.255176	24
17897	4.252780	24	17947	4.253992	24	17997	4.255200	24
17898	4.252804	24	17948	4.254016	24	17998	4.255224	24
17899	4.252829	25	17949	4.254040	24	17999	4.255248	24
17900	4.252853	24	17950	4.254064	24	18000	4.255272	24

Nomb.	5. 0' 0"	D.	Nomb.	5. 0' 50"	D.	Nomb.	5. 1' 40"	D.
18000	4.255273		18050	4.256477		18100	4.257679	
18001	4.255297	24	18051	4.256501	24	18101	4.257703	24
18002	4.255321	24	18052	4.256525	24	18102	4.257727	24
18003	4.255345	24	18053	4.256549	24	18103	4.257751	24
18004	4.255369	24	18054	4.256573	24	18104	4.257775	24
18005	4.255393	24	18055	4.256597	24	18105	4.257799	24
18006	4.255417	24	18056	4.256621	24	18106	4.257822	23
18007	4.255441	24	18057	4.256646	24	18107	4.257846	24
18008	4.255465	24	18058	4.256670	24	18108	4.257870	24
18009	4.255490	25	18059	4.256694	24	18109	4.257894	24
18010	4.255514	24	18060	4.256718	24	18110	4.257918	24
18011	4.255538	24	18061	4.256742	24	18111	4.257942	24
18012	4.255562	24	18062	4.256766	24	18112	4.257966	24
18013	4.255586	24	18063	4.256790	24	18113	4.257990	24
18014	4.255610	24	18064	4.256814	24	18114	4.258014	24
18015	4.255634	24	18065	4.256838	24	18115	4.258038	24
18016	4.255658	24	18066	4.256862	24	18116	4.258062	24
18017	4.255682	24	18067	4.256886	24	18117	4.258086	24
18018	4.255707	25	18068	4.256910	24	18118	4.258110	24
18019	4.255731	24	18069	4.256934	24	18119	4.258134	24
18020	4.255755	24	18070	4.256958	24	18120	4.258158	24
18021	4.255779	24	18071	4.256982	24	18121	4.258182	24
18022	4.255803	24	18072	4.257006	24	18122	4.258206	24
18023	4.255827	24	18073	4.257030	24	18123	4.258230	24
18024	4.255851	24	18074	4.257054	24	18124	4.258254	24
18025	4.255875	24	18075	4.257078	24	18125	4.258278	24
18026	4.255899	24	18076	4.257102	24	18126	4.258302	24
18027	4.255923	24	18077	4.257126	24	18127	4.258326	24
18028	4.255947	25	18078	4.257150	24	18128	4.258350	24
18029	4.255972	24	18079	4.257174	24	18129	4.258374	24
18030	4.255996	24	18080	4.257198	24	18130	4.258398	24
18031	4.256020	24	18081	4.257222	24	18131	4.258422	24
18032	4.256044	24	18082	4.257246	24	18132	4.258446	24
18033	4.256068	24	18083	4.257270	24	18133	4.258470	24
18034	4.256092	24	18084	4.257294	24	18134	4.258494	24
18035	4.256116	24	18085	4.257318	24	18135	4.258518	24
18036	4.256140	24	18086	4.257342	24	18136	4.258542	23
18037	4.256164	24	18087	4.257366	24	18137	4.258566	24
18038	4.256188	24	18088	4.257390	25	18138	4.258589	24
18039	4.256212	24	18089	4.257415	24	18139	4.258613	24
18040	4.256236	25	18090	4.257439	24	18140	4.258637	24
18041	4.256261	24	18091	4.257463	24	18141	4.258661	24
18042	4.256285	24	18092	4.257487	24	18142	4.258685	24
18043	4.256309	24	18093	4.257511	24	18143	4.258709	24
18044	4.256333	24	18094	4.257535	24	18144	4.258733	24
18045	4.256357	24	18095	4.257559	24	18145	4.258757	24
18046	4.256381	24	18096	4.257583	24	18146	4.258781	24
18047	4.256405	24	18097	4.257607	24	18147	4.258805	24
18048	4.256429	24	18098	4.257631	24	18148	4.258829	24
18049	4.256453	24	18099	4.257655	24	18149	4.258853	24
18050	4.256477		18100	4.257679		18150	4.258877	

Nomb.	5. 2' 30"	D.	Nomb.	5. 3' 20"	D.	Nomb.	5. 4' 10"	D.
	Logarith.			Logarith.			Logarith.	
18150	4.258877	24	18200	4.260071	24	18250	4.261263	24
18151	4.258901	24	18201	4.260095	24	18251	4.261287	24
18152	4.258924	23	18202	4.260119	24	18252	4.261310	23
18153	4.258948	24	18203	4.260143	24	18253	4.261334	24
18154	4.258972	24	18204	4.260167	24	18254	4.261358	24
18155	4.258996	24	18205	4.260191	24	18255	4.261382	24
18156	4.259020	24	18206	4.260215	24	18256	4.261406	24
18157	4.259044	24	18207	4.260238	23	18257	4.261429	23
18158	4.259068	24	18208	4.260262	24	18258	4.261453	24
18159	4.259092	24	18209	4.260286	24	18259	4.261477	24
18160	4.259116	24	18210	4.260310	24	18260	4.261501	24
18161	4.259140	24	18211	4.260334	24	18261	4.261525	24
18162	4.259164	24	18212	4.260358	23	18262	4.261548	23
18163	4.259188	24	18213	4.260381	23	18263	4.261572	24
18164	4.259211	23	18214	4.260405	24	18264	4.261596	24
18165	4.259235	24	18215	4.260429	24	18265	4.261620	24
18166	4.259259	24	18216	4.260453	24	18266	4.261643	23
18167	4.259283	24	18217	4.260477	24	18267	4.261667	24
18168	4.259307	24	18218	4.260501	24	18268	4.261691	24
18169	4.259331	24	18219	4.260525	24	18269	4.261715	24
18170	4.259355	24	18220	4.260548	23	18270	4.261738	23
18171	4.259379	24	18221	4.260572	24	18271	4.261762	24
18172	4.259403	24	18222	4.260596	24	18272	4.261786	24
18173	4.259427	24	18223	4.260620	24	18273	4.261810	24
18174	4.259451	24	18224	4.260644	24	18274	4.261834	24
18175	4.259474	23	18225	4.260667	23	18275	4.261857	23
18176	4.259498	24	18226	4.260691	24	18276	4.261881	24
18177	4.259522	24	18227	4.260715	24	18277	4.261905	24
18178	4.259546	24	18228	4.260739	24	18278	4.261929	24
18179	4.259570	24	18229	4.260763	24	18279	4.261952	23
18180	4.259594	24	18230	4.260787	24	18280	4.261976	24
18181	4.259618	24	18231	4.260810	23	18281	4.262000	24
18182	4.259642	24	18232	4.260834	24	18282	4.262024	23
18183	4.259665	23	18233	4.260858	24	18283	4.262047	24
18184	4.259689	24	18234	4.260882	24	18284	4.262071	24
18185	4.259713	24	18235	4.260906	24	18285	4.262095	24
18186	4.259737	24	18236	4.260930	24	18286	4.262119	24
18187	4.259761	24	18237	4.260953	23	18287	4.262142	23
18188	4.259785	24	18238	4.260977	24	18288	4.262166	24
18189	4.259809	24	18239	4.261001	24	18289	4.262190	24
18190	4.259833	24	18240	4.261025	24	18290	4.262214	24
18191	4.259857	24	18241	4.261049	24	18291	4.262237	23
18192	4.259880	23	18242	4.261072	23	18292	4.262261	24
18193	4.259904	24	18243	4.261096	24	18293	4.262285	24
18194	4.259928	24	18244	4.261120	24	18294	4.262309	24
18195	4.259952	24	18245	4.261144	24	18295	4.262332	23
18196	4.259976	24	18246	4.261168	24	18296	4.262356	24
18197	4.260000	24	18247	4.261191	23	18297	4.262380	24
18198	4.260024	24	18248	4.261215	24	18298	4.262404	24
18199	4.260047	23	18249	4.261239	24	18299	4.262427	23
18200	4.260071	24	18250	4.261263	24	18300	4.262451	24

Nomb.	5. 5' 0"	D.	Nomb.	5. 5' 50"	D.	Nomb.	5. 6' 40"	D.
Logarith.			Logarith.			Logarith.		
18300	4.262451		18350	4.263636		18400	4.264818	
18301	4.262475	24	18351	4.263660	24	18401	4.264841	23
18302	4.262499	24	18352	4.263683	23	18402	4.264865	24
18303	4.262522	23	18353	4.263707	24	18403	4.264889	24
18304	4.262546	24	18354	4.263731	24	18404	4.264912	23
18305	4.262570	24	18355	4.263754	23	18405	4.264936	24
18306	4.262593	23	18356	4.263778	23	18406	4.264959	23
18307	4.262617	24	18357	4.263802	24	18407	4.264983	24
18308	4.262641	24	18358	4.263825	23	18408	4.265007	24
18309	4.262665	24	18359	4.263849	24	18409	4.265030	23
18310	4.262688	23	18360	4.263873	24	18410	4.265054	24
18311	4.262712	24	18361	4.263896	23	18411	4.265077	23
18312	4.262736	24	18362	4.263920	24	18412	4.265101	24
18313	4.262759	23	18363	4.263944	24	18413	4.265125	24
18314	4.262783	24	18364	4.263967	23	18414	4.265148	23
18315	4.262807	24	18365	4.263991	24	18415	4.265172	24
18316	4.262831	24	18366	4.264015	24	18416	4.265195	23
18317	4.262854	23	18367	4.264038	23	18417	4.265219	24
18318	4.262878	24	18368	4.264062	24	18418	4.265242	23
18319	4.262902	24	18369	4.264086	24	18419	4.265266	24
18320	4.262925	23	18370	4.264109	23	18420	4.265290	24
18321	4.262949	24	18371	4.264133	24	18421	4.265313	23
18322	4.262973	24	18372	4.264156	23	18422	4.265337	24
18323	4.262997	24	18373	4.264180	24	18423	4.265360	23
18324	4.263020	23	18374	4.264204	24	18424	4.265384	24
18325	4.263044	24	18375	4.264227	23	18425	4.265407	23
18326	4.263068	24	18376	4.264251	24	18426	4.265431	24
18327	4.263091	23	18377	4.264275	24	18427	4.265455	24
18328	4.263115	24	18378	4.264298	23	18428	4.265478	23
18329	4.263139	24	18379	4.264322	24	18429	4.265502	24
18330	4.263162	23	18380	4.264345	23	18430	4.265525	23
18331	4.263186	24	18381	4.264369	24	18431	4.265549	24
18332	4.263210	24	18382	4.264393	24	18432	4.265572	23
18333	4.263234	24	18383	4.264416	23	18433	4.265596	24
18334	4.263257	23	18384	4.264440	24	18434	4.265620	24
18335	4.263281	24	18385	4.264464	24	18435	4.265643	23
18336	4.263305	24	18386	4.264487	23	18436	4.265667	24
18337	4.263328	23	18387	4.264511	24	18437	4.265690	23
18338	4.263352	24	18388	4.264534	23	18438	4.265714	24
18339	4.263376	24	18389	4.264558	24	18439	4.265737	23
18340	4.263399	23	18390	4.264582	24	18440	4.265761	24
18341	4.263423	24	18391	4.264605	23	18441	4.265784	23
18342	4.263447	24	18392	4.264629	24	18442	4.265808	24
18343	4.263470	23	18393	4.264653	24	18443	4.265832	24
18344	4.263494	24	18394	4.264676	23	18444	4.265855	23
18345	4.263518	24	18395	4.264700	24	18445	4.265879	24
18346	4.263541	23	18396	4.264723	23	18446	4.265902	23
18347	4.263565	24	18397	4.264747	24	18447	4.265926	24
18348	4.263589	24	18398	4.264771	23	18448	4.265949	23
18349	4.263612	23	18399	4.264794	24	18449	4.265973	24
18350	4.263636	24	18400	4.264818	23	18450	4.265996	23

Nomb.	5. 7' 30"	D.	Nomb.	5. 8' 10"	D.	Nomb.	5. 9' 10"	D.
	Logarith.			Logarith.			Logarith.	
18450	4.265096		18500	4.267172		18550	4.268344	
18451	4.266020	24	18501	4.267195	23	18551	4.268367	23
18452	4.266043	23	18502	4.267219	24	18552	4.268391	24
18453	4.266067	24	18503	4.267242	23	18553	4.268414	23
18454	4.266090	23	18504	4.267266	24	18554	4.268438	24
18455	4.266114	24	18505	4.267289	23	18555	4.268461	23
18456	4.266138	24	18506	4.267313	24	18556	4.268484	23
18457	4.266161	23	18507	4.267336	23	18557	4.268508	24
18458	4.266185	24	18508	4.267359	23	18558	4.268531	23
18459	4.266208	23	18509	4.267383	24	18559	4.268555	23
18460	4.266232	24	18510	4.267406	23	18560	4.268578	24
18461	4.266255	23	18511	4.267430	24	18561	4.268601	23
18462	4.266279	24	18512	4.267453	23	18562	4.268625	24
18463	4.266302	23	18513	4.267477	24	18563	4.268648	23
18464	4.266326	24	18514	4.267500	23	18564	4.268672	24
18465	4.266349	23	18515	4.267524	24	18565	4.268695	23
18466	4.266373	24	18516	4.267547	23	18566	4.268718	24
18467	4.266396	23	18517	4.267571	24	18567	4.268742	23
18468	4.266420	24	18518	4.267594	23	18568	4.268765	23
18469	4.266443	23	18519	4.267617	23	18569	4.268788	24
18470	4.266467	24	18520	4.267641	24	18570	4.268812	23
18471	4.266490	23	18521	4.267664	23	18571	4.268835	24
18472	4.266514	24	18522	4.267688	24	18572	4.268859	23
18473	4.266537	23	18523	4.267711	23	18573	4.268882	24
18474	4.266561	24	18524	4.267735	24	18574	4.268905	23
18475	4.266584	23	18525	4.267758	23	18575	4.268929	24
18476	4.266608	24	18526	4.267782	24	18576	4.268952	23
18477	4.266631	23	18527	4.267805	23	18577	4.268976	24
18478	4.266655	24	18528	4.267828	24	18578	4.268999	23
18479	4.266678	23	18529	4.267852	23	18579	4.269022	24
18480	4.266702	24	18530	4.267875	24	18580	4.269046	23
18481	4.266725	23	18531	4.267899	23	18581	4.269069	24
18482	4.266749	24	18532	4.267922	24	18582	4.269092	23
18483	4.266772	23	18533	4.267946	23	18583	4.269116	24
18484	4.266796	24	18534	4.267969	24	18584	4.269139	23
18485	4.266819	23	18535	4.267993	23	18585	4.269163	24
18486	4.266843	24	18536	4.268016	24	18586	4.269186	23
18487	4.266866	23	18537	4.268039	23	18587	4.269209	24
18488	4.266890	24	18538	4.268063	24	18588	4.269233	23
18489	4.266913	23	18539	4.268086	23	18589	4.269256	24
18490	4.266937	24	18540	4.268110	24	18590	4.269279	23
18491	4.266960	23	18541	4.268133	23	18591	4.269303	24
18492	4.266984	24	18542	4.268157	24	18592	4.269326	23
18493	4.267007	23	18543	4.268180	23	18593	4.269349	24
18494	4.267031	24	18544	4.268203	24	18594	4.269373	23
18495	4.267054	23	18545	4.268227	23	18595	4.269396	24
18496	4.267078	24	18546	4.268250	24	18596	4.269420	23
18497	4.267101	23	18547	4.268274	23	18597	4.269443	24
18498	4.267125	24	18548	4.268297	24	18598	4.269466	23
18499	4.267148	23	18549	4.268320	23	18599	4.269490	24
18500	4.267172	24	18550	4.268344	24	18600	4.269513	23

Nomb.	5. 10' 0"	D.	Nomb.	5. 10' 50"	D.	Nomb.	5. 11' 40"	D.
	Logarith.			Logarith.			Logarith.	
18600	4.269513	23	18650	4.270679	23	18700	4.271842	23
18601	4.269536	24	18651	4.270702	23	18701	4.271865	23
18602	4.269560	24	18652	4.270725	23	18702	4.271888	23
18603	4.269583	23	18653	4.270749	24	18703	4.271911	23
18604	4.269606	23	18654	4.270772	23	18704	4.271934	23
18605	4.269630	24	18655	4.270795	23	18705	4.271958	24
18606	4.269653	23	18656	4.270819	24	18706	4.271981	23
18607	4.269676	23	18657	4.270842	23	18707	4.272004	23
18608	4.269700	24	18658	4.270865	23	18708	4.272027	23
18609	4.269723	23	18659	4.270888	23	18709	4.272051	24
18610	4.269746	23	18660	4.270912	24	18710	4.272074	23
18611	4.269770	24	18661	4.270935	23	18711	4.272097	23
18612	4.269793	23	18662	4.270958	23	18712	4.272120	23
18613	4.269816	23	18663	4.270981	23	18713	4.272143	23
18614	4.269840	24	18664	4.271005	24	18714	4.272167	24
18615	4.269863	23	18665	4.271028	23	18715	4.272190	23
18616	4.269886	23	18666	4.271051	23	18716	4.272213	23
18617	4.269910	24	18667	4.271074	23	18717	4.272236	23
18618	4.269933	23	18668	4.271098	24	18718	4.272259	23
18619	4.269956	23	18669	4.271121	23	18719	4.272283	24
18620	4.269980	24	18670	4.271144	23	18720	4.272306	23
18621	4.270003	23	18671	4.271168	24	18721	4.272329	23
18622	4.270026	23	18672	4.271191	23	18722	4.272352	23
18623	4.270050	24	18673	4.271214	23	18723	4.272375	23
18624	4.270073	23	18674	4.271237	23	18724	4.272399	24
18625	4.270096	23	18675	4.271261	24	18725	4.272422	23
18626	4.270120	24	18676	4.271284	23	18726	4.272445	23
18627	4.270143	23	18677	4.271307	23	18727	4.272468	23
18628	4.270166	23	18678	4.271330	23	18728	4.272491	23
18629	4.270190	24	18679	4.271354	24	18729	4.272515	24
18630	4.270213	23	18680	4.271377	23	18730	4.272538	23
18631	4.270236	23	18681	4.271400	23	18731	4.272561	23
18632	4.270259	23	18682	4.271423	23	18732	4.272584	23
18633	4.270283	24	18683	4.271447	24	18733	4.272607	23
18634	4.270306	23	18684	4.271470	23	18734	4.272631	24
18635	4.270329	23	18685	4.271493	23	18735	4.272654	23
18636	4.270353	24	18686	4.271516	23	18736	4.272677	23
18637	4.270376	23	18687	4.271540	24	18737	4.272700	23
18638	4.270399	23	18688	4.271563	23	18738	4.272723	23
18639	4.270423	24	18689	4.271586	23	18739	4.272746	23
18640	4.270446	23	18690	4.271609	23	18740	4.272770	24
18641	4.270469	23	18691	4.271633	24	18741	4.272793	23
18642	4.270493	24	18692	4.271656	23	18742	4.272816	23
18643	4.270516	23	18693	4.271679	23	18743	4.272839	23
18644	4.270539	23	18694	4.271702	23	18744	4.272862	23
18645	4.270562	24	18695	4.271725	23	18745	4.272885	23
18646	4.270586	24	18696	4.271749	24	18746	4.272909	24
18647	4.270609	23	18697	4.271772	23	18747	4.272932	23
18648	4.270632	23	18698	4.271795	23	18748	4.272955	23
18649	4.270655	23	18699	4.271818	23	18749	4.272978	23
18650	4.270679	24	18700	4.271842	24	18750	4.273001	23

Nomb.	5. 12' 30"	D.	Nomb.	5. 13' 20"	D.	Nomb.	5. 14' 10"	D.
	Logarith.			Logarith.			Logarith.	
18750	4.273001		18800	4.274158		18850	4.275311	
18751	4.273024	23	18801	4.274181	23	18851	4.275334	23
18752	4.273048	24	18802	4.274204	23	18852	4.275357	23
18753	4.273071	23	18803	4.274227	23	18853	4.275380	23
18754	4.273094	23	18804	4.274250	23	18854	4.275404	24
18755	4.273117	23	18805	4.274273	23	18855	4.275427	23
18756	4.273140	23	18806	4.274296	23	18856	4.275450	23
18757	4.273163	23	18807	4.274320	24	18857	4.275473	23
18758	4.273187	24	18808	4.274343	23	18858	4.275496	23
18759	4.273210	23	18809	4.274366	23	18859	4.275519	23
18760	4.273233	23	18810	4.274389	23	18860	4.275542	23
18761	4.273256	23	18811	4.274412	23	18861	4.275565	23
18762	4.273279	23	18812	4.274435	23	18862	4.275588	23
18763	4.273302	23	18813	4.274458	23	18863	4.275611	23
18764	4.273325	23	18814	4.274481	23	18864	4.275634	23
18765	4.273349	24	18815	4.274504	23	18865	4.275657	23
18766	4.273372	23	18816	4.274527	23	18866	4.275680	23
18767	4.273395	23	18817	4.274550	23	18867	4.275703	23
18768	4.273418	23	18818	4.274573	23	18868	4.275726	23
18769	4.273441	23	18819	4.274597	24	18869	4.275749	23
18770	4.273464	23	18820	4.274620	23	18870	4.275772	23
18771	4.273487	23	18821	4.274643	23	18871	4.275795	23
18772	4.273511	24	18822	4.274666	23	18872	4.275818	23
18773	4.273534	23	18823	4.274689	23	18873	4.275841	23
18774	4.273557	23	18824	4.274712	23	18874	4.275864	23
18775	4.273580	23	18825	4.274735	23	18875	4.275887	23
18776	4.273603	23	18826	4.274758	23	18876	4.275910	23
18777	4.273626	23	18827	4.274781	23	18877	4.275933	23
18778	4.273649	23	18828	4.274804	23	18878	4.275956	23
18779	4.273672	23	18829	4.274827	23	18879	4.275979	23
18780	4.273696	24	18830	4.274850	23	18880	4.276002	23
18781	4.273719	23	18831	4.274873	23	18881	4.276025	23
18782	4.273742	23	18832	4.274896	23	18882	4.276048	23
18783	4.273765	23	18833	4.274920	24	18883	4.276071	23
18784	4.273788	23	18834	4.274943	23	18884	4.276094	23
18785	4.273811	23	18835	4.274966	23	18885	4.276117	23
18786	4.273834	23	18836	4.274989	23	18886	4.276140	23
18787	4.273857	23	18837	4.275012	23	18887	4.276163	23
18788	4.273881	24	18838	4.275035	23	18888	4.276186	23
18789	4.273904	23	18839	4.275058	23	18889	4.276209	23
18790	4.273927	23	18840	4.275081	23	18890	4.276232	23
18791	4.273950	23	18841	4.275104	23	18891	4.276255	23
18792	4.273973	23	18842	4.275127	23	18892	4.276278	23
18793	4.273996	23	18843	4.275150	23	18893	4.276301	23
18794	4.274019	23	18844	4.275173	23	18894	4.276324	23
18795	4.274042	23	18845	4.275196	23	18895	4.276347	23
18796	4.274065	24	18846	4.275219	23	18896	4.276370	23
18797	4.274089	23	18847	4.275242	23	18897	4.276393	23
18798	4.274112	23	18848	4.275265	23	18898	4.276416	23
18799	4.274135	23	18849	4.275288	23	18899	4.276439	23
18800	4.274158	23	18850	4.275311	23	18900	4.276462	23

Nomb.	5. 15' 0"	D.	Nomb.	5. 15' 50"	D.	Nomb.	5. 16' 40"	D.
	Logarith.			Logarith.			Logarith.	
18900	4.276462		18950	4.277609		19000	4.278754	
18901	4.276485	23	18951	4.277632	23	19001	4.278776	22
18902	4.276508	23	18952	4.277655	23	19002	4.278799	23
18903	4.276531	23	18953	4.277678	23	19003	4.278822	23
18904	4.276554	23	18954	4.277701	23	19004	4.278845	23
18905	4.276577	23	18955	4.277724	23	19005	4.278868	23
18906	4.276600	23	18956	4.277747	23	19006	4.278891	23
18907	4.276623	23	18957	4.277770	23	19007	4.278914	23
18908	4.276646	23	18958	4.277793	23	19008	4.278936	22
18909	4.276669	23	18959	4.277815	22	19009	4.278959	23
18910	4.276692	23	18960	4.277838	23	19010	4.278982	23
18911	4.276714	22	18961	4.277861	23	19011	4.279005	23
18912	4.276737	23	18962	4.277884	23	19012	4.279028	23
18913	4.276760	23	18963	4.277907	23	19013	4.279051	23
18914	4.276783	23	18964	4.277930	23	19014	4.279073	22
18915	4.276806	23	18965	4.277953	23	19015	4.279096	23
18916	4.276829	23	18966	4.277976	23	19016	4.279119	23
18917	4.276852	23	18967	4.277999	23	19017	4.279142	23
18918	4.276875	23	18968	4.278022	23	19018	4.279165	23
18919	4.276898	23	18969	4.278044	22	19019	4.279188	23
18920	4.276921	23	18970	4.278067	23	19020	4.279211	23
18921	4.276944	23	18971	4.278090	23	19021	4.279233	22
18922	4.276967	23	18972	4.278113	23	19022	4.279256	23
18923	4.276990	23	18973	4.278136	23	19023	4.279279	23
18924	4.277013	23	18974	4.278159	23	19024	4.279302	23
18925	4.277036	23	18975	4.278182	23	19025	4.279325	23
18926	4.277059	23	18976	4.278205	23	19026	4.279347	22
18927	4.277082	23	18977	4.278228	23	19027	4.279370	23
18928	4.277105	23	18978	4.278250	22	19028	4.279393	23
18929	4.277128	23	18979	4.278273	23	19029	4.279416	23
18930	4.277151	23	18980	4.278296	23	19030	4.279439	23
18931	4.277174	23	18981	4.278319	23	19031	4.279462	23
18932	4.277196	22	18982	4.278342	23	19032	4.279484	22
18933	4.277219	23	18983	4.278365	23	19033	4.279507	23
18934	4.277242	23	18984	4.278388	23	19034	4.279530	23
18935	4.277265	23	18985	4.278411	23	19035	4.279553	23
18936	4.277288	23	18986	4.278433	22	19036	4.279576	23
18937	4.277311	23	18987	4.278456	23	19037	4.279599	23
18938	4.277334	23	18988	4.278479	23	19038	4.279621	22
18939	4.277357	23	18989	4.278502	23	19039	4.279644	23
18940	4.277380	23	18990	4.278525	23	19040	4.279667	23
18941	4.277403	23	18991	4.278548	23	19041	4.279690	23
18942	4.277426	23	18992	4.278571	23	19042	4.279713	23
18943	4.277449	23	18993	4.278594	22	19043	4.279735	22
18944	4.277472	23	18994	4.278616	22	19044	4.279758	23
18945	4.277495	23	18995	4.278639	23	19045	4.279781	23
18946	4.277518	22	18996	4.278662	23	19046	4.279804	23
18947	4.277540	23	18997	4.278685	23	19047	4.279827	22
18948	4.277563	23	18998	4.278708	23	19048	4.279849	22
18949	4.277586	23	18999	4.278731	23	19049	4.279872	23
18950	4.277609		19000	4.278754		19050	4.279895	23

Nomb.	5. 17' 30"	D.	Nomb.	5. 18' 20"	D.	Nomb.	5. 19' 10"	D.
19050	4.279895		19100	4.281033		19150	4.282169	
19051	4.279918	23	19101	4.281056	23	19151	4.282191	22
19052	4.279941	23	19102	4.281079	23	19152	4.282214	23
19053	4.279963	22	19103	4.281102	23	19153	4.282237	23
19054	4.279986	23	19104	4.281124	22	19154	4.282259	22
19055	4.280009	23	19105	4.281147	23	19155	4.282282	23
19056	4.280032	23	19106	4.281170	23	19156	4.282305	23
19057	4.280055	23	19107	4.281192	22	19157	4.282327	22
19058	4.280077	22	19108	4.281215	23	19158	4.282350	23
19059	4.280100	23	19109	4.281238	23	19159	4.282373	23
19060	4.280123	23	19110	4.281261	23	19160	4.282396	23
19061	4.280146	23	19111	4.281283	22	19161	4.282418	22
19062	4.280168	22	19112	4.281306	23	19162	4.282441	23
19063	4.280191	23	19113	4.281329	23	19163	4.282463	22
19064	4.280214	23	19114	4.281352	23	19164	4.282486	23
19065	4.280237	23	19115	4.281374	22	19165	4.282509	23
19066	4.280260	23	19116	4.281397	23	19166	4.282531	22
19067	4.280282	22	19117	4.281420	23	19167	4.282554	23
19068	4.280305	23	19118	4.281442	22	19168	4.282577	23
19069	4.280328	23	19119	4.281465	23	19169	4.282599	22
19070	4.280351	23	19120	4.281488	23	19170	4.282622	23
19071	4.280373	22	19121	4.281511	23	19171	4.282645	23
19072	4.280396	23	19122	4.281533	22	19172	4.282667	22
19073	4.280419	23	19123	4.281556	23	19173	4.282690	23
19074	4.280442	23	19124	4.281579	23	19174	4.282713	23
19075	4.280465	23	19125	4.281601	22	19175	4.282735	22
19076	4.280487	22	19126	4.281624	23	19176	4.282758	23
19077	4.280510	23	19127	4.281647	23	19177	4.282781	23
19078	4.280533	23	19128	4.281670	23	19178	4.282803	22
19079	4.280556	23	19129	4.281692	22	19179	4.282826	23
19080	4.280578	22	19130	4.281715	23	19180	4.282849	23
19081	4.280601	23	19131	4.281738	23	19181	4.282871	22
19082	4.280624	23	19132	4.281760	22	19182	4.282894	23
19083	4.280647	23	19133	4.281783	23	19183	4.282917	23
19084	4.280669	22	19134	4.281806	23	19184	4.282939	22
19085	4.280692	23	19135	4.281828	22	19185	4.282962	23
19086	4.280715	23	19136	4.281851	23	19186	4.282984	22
19087	4.280738	23	19137	4.281874	23	19187	4.283007	23
19088	4.280760	22	19138	4.281897	23	19188	4.283030	23
19089	4.280783	22	19139	4.281919	22	19189	4.283052	22
19090	4.280806	23	19140	4.281942	23	19190	4.283075	23
19091	4.280829	23	19141	4.281965	23	19191	4.283098	23
19092	4.280851	22	19142	4.281987	22	19192	4.283120	22
19093	4.280874	23	19143	4.282010	23	19193	4.283143	23
19094	4.280897	23	19144	4.282033	23	19194	4.283165	22
19095	4.280920	23	19145	4.282055	22	19195	4.283188	23
19096	4.280942	22	19146	4.282078	23	19196	4.283211	23
19097	4.280965	23	19147	4.282101	22	19197	4.283233	23
19098	4.280988	23	19148	4.282123	22	19198	4.283256	23
19099	4.281011	23	19149	4.282146	23	19199	4.283279	22
19100	4.281033	22	19150	4.282169	23	19200	4.283301	22

Nomb.	5. 20' 0"	D.	Nomb.	5. 20' 50"	D.	Nomb.	5. 21' 40"	D.
Logarith.			Logarith.			Logarith.		
19200	4.283301	23	19250	4.284431	22	19300	4.285557	23
19201	4.283324	22	19251	4.284453	23	19301	4.285580	22
19202	4.283346	23	19252	4.284476	22	19302	4.285602	23
19203	4.283369	23	19253	4.284498	23	19303	4.285625	22
19204	4.283392	22	19254	4.284521	22	19304	4.285647	23
19205	4.283414	23	19255	4.284544	23	19305	4.285670	22
19206	4.283437	23	19256	4.284566	22	19306	4.285692	23
19207	4.283460	22	19257	4.284589	23	19307	4.285715	22
19208	4.283482	23	19258	4.284611	22	19308	4.285737	23
19209	4.283505	22	19259	4.284634	23	19309	4.285760	22
19210	4.283527	23	19260	4.284656	22	19310	4.285782	23
19211	4.283550	23	19261	4.284679	23	19311	4.285805	22
19212	4.283573	22	19262	4.284701	22	19312	4.285827	23
19213	4.283595	23	19263	4.284724	23	19313	4.285850	22
19214	4.283618	22	19264	4.284746	23	19314	4.285872	23
19215	4.283640	23	19265	4.284769	22	19315	4.285895	22
19216	4.283663	23	19266	4.284792	23	19316	4.285917	23
19217	4.283686	22	19267	4.284814	22	19317	4.285940	22
19218	4.283708	23	19268	4.284837	23	19318	4.285962	22
19219	4.283731	22	19269	4.284859	22	19319	4.285985	23
19220	4.283753	23	19270	4.284882	23	19320	4.286007	22
19221	4.283776	23	19271	4.284904	22	19321	4.286030	23
19222	4.283799	22	19272	4.284927	23	19322	4.286052	22
19223	4.283821	23	19273	4.284949	22	19323	4.286075	23
19224	4.283844	22	19274	4.284972	23	19324	4.286097	22
19225	4.283866	23	19275	4.284994	22	19325	4.286119	23
19226	4.283889	23	19276	4.285017	23	19326	4.286142	22
19227	4.283912	22	19277	4.285039	22	19327	4.286164	23
19228	4.283934	23	19278	4.285062	23	19328	4.286187	22
19229	4.283957	22	19279	4.285085	23	19329	4.286209	23
19230	4.283979	23	19280	4.285107	22	19330	4.286232	22
19231	4.284002	23	19281	4.285130	23	19331	4.286254	23
19232	4.284024	22	19282	4.285152	22	19332	4.286277	22
19233	4.284047	23	19283	4.285175	23	19333	4.286299	22
19234	4.284070	22	19284	4.285197	22	19334	4.286322	23
19235	4.284092	23	19285	4.285220	23	19335	4.286344	22
19236	4.284115	22	19286	4.285242	22	19336	4.286367	23
19237	4.284137	23	19287	4.285265	23	19337	4.286389	22
19238	4.284160	22	19288	4.285287	22	19338	4.286412	23
19239	4.284182	23	19289	4.285310	23	19339	4.286434	22
19240	4.284205	22	19290	4.285332	22	19340	4.286456	23
19241	4.284228	23	19291	4.285355	23	19341	4.286479	22
19242	4.284250	22	19292	4.285377	22	19342	4.286501	23
19243	4.284273	23	19293	4.285400	22	19343	4.286524	22
19244	4.284295	22	19294	4.285422	23	19344	4.286546	23
19245	4.284318	23	19295	4.285445	22	19345	4.286569	22
19246	4.284340	22	19296	4.285467	23	19346	4.286591	23
19247	4.284363	23	19297	4.285490	22	19347	4.286614	22
19248	4.284386	22	19298	4.285512	23	19348	4.286636	23
19249	4.284408	23	19299	4.285535	22	19349	4.286658	22
19250	4.284431	22	19300	4.285557	23	19350	4.286681	23

Nomb.	5. 22' 30"	D.	Nomb.	5. 23' 20"	D.	Nomb.	5. 24' 10"	D.
	Logarith.			Logarith.			Logarith.	
19350	4.286681	22	19400	4.287802	22	19450	4.288920	22
19351	4.286703	23	19401	4.287824	22	19451	4.288942	22
19352	4.286726	23	19402	4.287846	22	19452	4.288964	22
19353	4.286748	22	19403	4.287869	23	19453	4.288987	23
19354	4.286771	23	19404	4.287891	22	19454	4.289009	22
19355	4.286793	22	19405	4.287914	23	19455	4.289031	22
19356	4.286816	23	19406	4.287936	22	19456	4.289054	23
19357	4.286838	22	19407	4.287958	22	19457	4.289076	22
19358	4.286860	22	19408	4.287981	23	19458	4.289098	22
19359	4.286883	23	19409	4.288003	22	19459	4.289120	22
19360	4.286905	22	19410	4.288025	22	19460	4.289143	23
19361	4.286928	23	19411	4.288048	23	19461	4.289165	22
19362	4.286950	22	19412	4.288070	22	19462	4.289187	22
19363	4.286973	23	19413	4.288093	23	19463	4.289210	23
19364	4.286995	22	19414	4.288115	22	19464	4.289232	22
19365	4.287017	22	19415	4.288137	22	19465	4.289254	22
19366	4.287040	23	19416	4.288160	23	19466	4.289277	23
19367	4.287062	22	19417	4.288182	22	19467	4.289299	22
19368	4.287085	23	19418	4.288204	22	19468	4.289321	22
19369	4.287107	22	19419	4.288227	23	19469	4.289344	23
19370	4.287130	23	19420	4.288249	22	19470	4.289366	22
19371	4.287152	22	19421	4.288272	23	19471	4.289388	22
19372	4.287174	22	19422	4.288294	22	19472	4.289411	23
19373	4.287197	23	19423	4.288316	22	19473	4.289433	22
19374	4.287219	22	19424	4.288339	23	19474	4.289455	22
19375	4.287242	23	19425	4.288361	22	19475	4.289477	22
19376	4.287264	22	19426	4.288383	22	19476	4.289500	23
19377	4.287287	23	19427	4.288406	23	19477	4.289522	22
19378	4.287309	22	19428	4.288428	22	19478	4.289544	22
19379	4.287331	22	19429	4.288450	22	19479	4.289567	23
19380	4.287354	23	19430	4.288473	23	19480	4.289589	22
19381	4.287376	22	19431	4.288495	22	19481	4.289611	22
19382	4.287399	23	19432	4.288517	22	19482	4.289633	22
19383	4.287421	22	19433	4.288540	23	19483	4.289656	23
19384	4.287443	22	19434	4.288562	22	19484	4.289678	22
19385	4.287466	23	19435	4.288584	22	19485	4.289700	22
19386	4.287488	22	19436	4.288607	23	19486	4.289723	23
19387	4.287511	23	19437	4.288629	22	19487	4.289745	22
19388	4.287533	22	19438	4.288652	23	19488	4.289767	22
19389	4.287555	22	19439	4.288674	22	19489	4.289790	23
19390	4.287578	23	19440	4.288696	22	19490	4.289812	22
19391	4.287600	22	19441	4.288719	23	19491	4.289834	22
19392	4.287623	23	19442	4.288741	22	19492	4.289856	22
19393	4.287645	22	19443	4.288763	22	19493	4.289879	23
19394	4.287667	22	19444	4.288786	23	19494	4.289901	22
19395	4.287690	23	19445	4.288808	22	19495	4.289923	22
19396	4.287712	22	19446	4.288830	22	19496	4.289945	22
19397	4.287735	23	19447	4.288853	23	19497	4.289968	23
19398	4.287757	22	19448	4.288875	22	19498	4.289990	22
19399	4.287779	22	19449	4.288897	22	19499	4.290012	22
19400	4.287802	23	19450	4.288920	23	19500	4.290035	23

Nomb.	5. 25' 0"	D.	Nomb.	5. 25' 50"	D.	Nomb.	5. 26' 40"	D.
19500	4.290035		19550	4.291147		19600	4.292256	
19501	4.290057	22	19551	4.291169	22	19601	4.292278	22
19502	4.290079	22	19552	4.291191	22	19602	4.292300	22
19503	4.290101	22	19553	4.291213	22	19603	4.292322	22
19504	4.290124	23	19554	4.291236	23	19604	4.292345	23
19505	4.290146	22	19555	4.291258	22	19605	4.292367	22
19506	4.290168	22	19556	4.291280	22	19606	4.292389	22
19507	4.290190	22	19557	4.291302	22	19607	4.292411	22
19508	4.290213	23	19558	4.291324	22	19608	4.292433	22
19509	4.290235	22	19559	4.291347	23	19609	4.292455	22
19510	4.290257	22	19560	4.291369	22	19610	4.292478	23
19511	4.290279	22	19561	4.291391	22	19611	4.292500	22
19512	4.290302	23	19562	4.291413	22	19612	4.292522	22
19513	4.290324	22	19563	4.291435	22	19613	4.292544	22
19514	4.290346	22	19564	4.291458	23	19614	4.292566	22
19515	4.290369	23	19565	4.291480	22	19615	4.292588	22
19516	4.290391	22	19566	4.291502	22	19616	4.292610	22
19517	4.290413	22	19567	4.291524	22	19617	4.292633	23
19518	4.290435	22	19568	4.291546	22	19618	4.292655	22
19519	4.290458	23	19569	4.291569	22	19619	4.292677	22
19520	4.290480	22	19570	4.291591	23	19620	4.292699	22
19521	4.290502	22	19571	4.291613	22	19621	4.292721	22
19522	4.290524	22	19572	4.291635	22	19622	4.292743	22
19523	4.290547	23	19573	4.291657	22	19623	4.292765	22
19524	4.290569	22	19574	4.291680	23	19624	4.292787	22
19525	4.290591	22	19575	4.291702	22	19625	4.292810	23
19526	4.290613	22	19576	4.291724	22	19626	4.292832	22
19527	4.290635	22	19577	4.291746	22	19627	4.292854	22
19528	4.290658	23	19578	4.291768	22	19628	4.292876	22
19529	4.290680	22	19579	4.291790	22	19629	4.292898	22
19530	4.290702	23	19580	4.291813	23	19630	4.292920	22
19531	4.290724	22	19581	4.291835	22	19631	4.292942	22
19532	4.290747	22	19582	4.291857	22	19632	4.292964	22
19533	4.290769	22	19583	4.291879	22	19633	4.292987	23
19534	4.290791	22	19584	4.291901	22	19634	4.293009	22
19535	4.290813	23	19585	4.291924	23	19635	4.293031	22
19536	4.290836	22	19586	4.291946	22	19636	4.293053	22
19537	4.290858	22	19587	4.291968	22	19637	4.293075	22
19538	4.290880	22	19588	4.291990	22	19638	4.293097	22
19539	4.290902	23	19589	4.292012	22	19639	4.293119	22
19540	4.290925	22	19590	4.292034	23	19640	4.293141	23
19541	4.290947	22	19591	4.292057	22	19641	4.293164	22
19542	4.290969	22	19592	4.292079	22	19642	4.293186	22
19543	4.290991	22	19593	4.292101	22	19643	4.293208	22
19544	4.291013	23	19594	4.292123	22	19644	4.293230	22
19545	4.291036	22	19595	4.292145	22	19645	4.293252	22
19546	4.291058	22	19596	4.292167	22	19646	4.293274	22
19547	4.291080	22	19597	4.292190	23	19647	4.293296	22
19548	4.291102	22	19598	4.292212	22	19648	4.293318	22
19549	4.291124	23	19599	4.292234	22	19649	4.293340	23
19550	4.291147		19600	4.292256		19650	4.293363	

Nomb.	5. 27' 30"	D.	Nomb.	5. 28' 20"	D.	Nomb.	5. 29' 10"	D.
	Logarith.			Logarith.			Logarith.	
19650	4.293363	22	19700	4.294466	22	19750	4.295567	22
19651	4.293385	22	19701	4.294488	22	19751	4.295589	22
19652	4.293407	22	19702	4.294510	22	19752	4.295611	22
19653	4.293429	22	19703	4.294532	22	19753	4.295633	22
19654	4.293451	22	19704	4.294554	22	19754	4.295655	22
19655	4.293473	22	19705	4.294576	22	19755	4.295677	22
19656	4.293495	22	19706	4.294598	22	19756	4.295699	22
19657	4.293517	22	19707	4.294620	23	19757	4.295721	22
19658	4.293539	22	19708	4.294643	23	19758	4.295743	22
19659	4.293561	22	19709	4.294665	22	19759	4.295765	22
19660	4.293583	23	19710	4.294687	22	19760	4.295787	22
19661	4.293606	22	19711	4.294709	22	19761	4.295809	22
19662	4.293628	22	19712	4.294731	22	19762	4.295831	22
19663	4.293650	22	19713	4.294753	22	19763	4.295853	22
19664	4.293672	22	19714	4.294775	22	19764	4.295875	22
19665	4.293694	22	19715	4.294797	22	19765	4.295897	22
19666	4.293716	22	19716	4.294819	22	19766	4.295919	22
19667	4.293738	22	19717	4.294841	22	19767	4.295941	22
19668	4.293760	22	19718	4.294863	22	19768	4.295963	22
19669	4.293782	22	19719	4.294885	22	19769	4.295985	22
19670	4.293804	22	19720	4.294907	22	19770	4.296007	22
19671	4.293826	22	19721	4.294929	22	19771	4.296029	22
19672	4.293848	23	19722	4.294951	22	19772	4.296051	22
19673	4.293871	22	19723	4.294973	22	19773	4.296073	21
19674	4.293893	22	19724	4.294995	22	19774	4.296095	22
19675	4.293915	22	19725	4.295017	22	19775	4.296116	22
19676	4.293937	22	19726	4.295039	22	19776	4.296138	22
19677	4.293959	22	19727	4.295061	22	19777	4.296160	22
19678	4.293981	22	19728	4.295083	22	19778	4.296182	22
19679	4.294003	22	19729	4.295105	22	19779	4.296204	22
19680	4.294025	22	19730	4.295127	22	19780	4.296226	22
19681	4.294047	22	19731	4.295149	22	19781	4.296248	22
19682	4.294069	22	19732	4.295171	22	19782	4.296270	22
19683	4.294091	22	19733	4.295193	22	19783	4.296292	22
19684	4.294113	22	19734	4.295215	22	19784	4.296314	22
19685	4.294135	22	19735	4.295237	22	19785	4.296336	22
19686	4.294157	23	19736	4.295259	22	19786	4.296358	22
19687	4.294180	22	19737	4.295281	22	19787	4.296380	22
19688	4.294202	22	19738	4.295303	22	19788	4.296402	22
19689	4.294224	22	19739	4.295325	22	19789	4.296424	22
19690	4.294246	22	19740	4.295347	22	19790	4.296446	22
19691	4.294268	22	19741	4.295369	22	19791	4.296468	22
19692	4.294290	22	19742	4.295391	22	19792	4.296490	22
19693	4.294312	22	19743	4.295413	22	19793	4.296512	22
19694	4.294334	22	19744	4.295435	22	19794	4.296534	22
19695	4.294356	22	19745	4.295457	22	19795	4.296556	21
19696	4.294378	22	19746	4.295479	22	19796	4.296577	22
19697	4.294400	22	19747	4.295501	22	19797	4.296599	22
19698	4.294422	22	19748	4.295523	22	19798	4.296621	22
19699	4.294444	22	19749	4.295545	22	19799	4.296643	22
19700	4.294466	22	19750	4.295567	22	19800	4.296665	22

Nomb.	5. 30' 0"	D.	Nomb.	5. 30' 50"	D.	Nomb.	5. 31' 40"	D.
19800	4.296665		19850	4.297760		19900	4.298853	
19801	4.296687	22	19851	4.297782	22	19901	4.298875	22
19802	4.296709	22	19852	4.297804	22	19902	4.298897	22
19803	4.296731	22	19853	4.297826	22	19903	4.298918	21
19804	4.296753	22	19854	4.297848	22	19904	4.298940	22
19805	4.296775	22	19855	4.297870	22	19905	4.298962	22
19806	4.296797	22	19856	4.297892	22	19906	4.298984	22
19807	4.296819	22	19857	4.297914	22	19907	4.299006	22
19808	4.296841	22	19858	4.297935	21	19908	4.299028	22
19809	4.296863	22	19859	4.297957	22	19909	4.299049	21
19810	4.296884	21	19860	4.297979	22	19910	4.299071	22
19811	4.296906	22	19861	4.298001	22	19911	4.299093	22
19812	4.296928	22	19862	4.298023	22	19912	4.299115	22
19813	4.296950	22	19863	4.298045	22	19913	4.299137	22
19814	4.296972	22	19864	4.298067	22	19914	4.299158	21
19815	4.296994	22	19865	4.298089	22	19915	4.299180	22
19816	4.297016	22	19866	4.298110	21	19916	4.299202	22
19817	4.297038	22	19867	4.298132	22	19917	4.299224	22
19818	4.297060	22	19868	4.298154	22	19918	4.299246	22
19819	4.297082	22	19869	4.298176	22	19919	4.299267	21
19820	4.297104	22	19870	4.298198	22	19920	4.299289	22
19821	4.297126	22	19871	4.298220	22	19921	4.299311	22
19822	4.297147	21	19872	4.298242	22	19922	4.299333	22
19823	4.297169	22	19873	4.298263	21	19923	4.299355	22
19824	4.297191	22	19874	4.298285	22	19924	4.299376	21
19825	4.297213	22	19875	4.298307	22	19925	4.299398	22
19826	4.297235	22	19876	4.298329	22	19926	4.299420	22
19827	4.297257	22	19877	4.298351	22	19927	4.299442	22
19828	4.297279	22	19878	4.298373	22	19928	4.299464	22
19829	4.297301	22	19879	4.298394	21	19929	4.299485	21
19830	4.297323	22	19880	4.298416	22	19930	4.299507	22
19831	4.297345	22	19881	4.298438	22	19931	4.299529	22
19832	4.297366	21	19882	4.298460	22	19932	4.299551	22
19833	4.297388	22	19883	4.298482	22	19933	4.299573	22
19834	4.297410	22	19884	4.298504	22	19934	4.299594	21
19835	4.297432	22	19885	4.298526	22	19935	4.299616	22
19836	4.297454	22	19886	4.298547	21	19936	4.299638	22
19837	4.297476	22	19887	4.298569	22	19937	4.299660	22
19838	4.297498	22	19888	4.298591	22	19938	4.299682	22
19839	4.297520	22	19889	4.298613	22	19939	4.299703	21
19840	4.297542	22	19890	4.298635	22	19940	4.299725	22
19841	4.297564	21	19891	4.298657	22	19941	4.299747	22
19842	4.297585	22	19892	4.298678	21	19942	4.299769	22
19843	4.297607	22	19893	4.298700	22	19943	4.299790	21
19844	4.297629	22	19894	4.298722	22	19944	4.299812	22
19845	4.297651	22	19895	4.298744	22	19945	4.299834	22
19846	4.297673	22	19896	4.298766	22	19946	4.299856	22
19847	4.297695	22	19897	4.298788	21	19947	4.299878	21
19848	4.297717	22	19898	4.298809	22	19948	4.299899	22
19849	4.297739	21	19899	4.298831	22	19949	4.299921	22
19850	4.297760		19900	4.298853		19950	4.299943	

Nomb.	5. 32' 30"	D.	Nomb.	5. 33' 20"	D.	Nomb.	5. 34' 10"	D.
	Logarith.			Logarith.			Logarith.	
19950	4.299943		20000	4.301030		20050	4.302114	22
19951	4.299965	22	20001	4.301052	21	20051	4.302136	22
19952	4.299986	21	20002	4.301073	22	20052	4.302158	21
19953	4.300008	22	20003	4.301095	22	20053	4.302179	22
19954	4.300030	22	20004	4.301117	22	20054	4.302201	22
		22			22			22
19955	4.300052	21	20005	4.301139	21	20055	4.302223	21
19956	4.300073	22	20006	4.301160	22	20056	4.302244	22
19957	4.300095	22	20007	4.301182	22	20057	4.302266	22
19958	4.300117	22	20008	4.301204	21	20058	4.302288	21
19959	4.300139	21	20009	4.301225	22	20059	4.302309	22
		22			22			22
19960	4.300160	22	20010	4.301247	22	20060	4.302331	22
19961	4.300182	22	20011	4.301269	21	20061	4.302353	21
19962	4.300204	22	20012	4.301290	22	20062	4.302374	22
19963	4.300226	22	20013	4.301312	22	20063	4.302396	21
19964	4.300248	21	20014	4.301334	22	20064	4.302417	22
		22			22			22
19965	4.300269	22	20015	4.301356	21	20065	4.302439	22
19966	4.300291	22	20016	4.301377	22	20066	4.302461	21
19967	4.300313	22	20017	4.301399	22	20067	4.302482	22
19968	4.300335	22	20018	4.301421	21	20068	4.302504	22
19969	4.300356	21	20019	4.301442	22	20069	4.302526	21
		22			22			22
19970	4.300378	22	20020	4.301464	22	20070	4.302547	22
19971	4.300400	22	20021	4.301486	21	20071	4.302569	22
19972	4.300422	22	20022	4.301507	22	20072	4.302591	21
19973	4.300443	21	20023	4.301529	22	20073	4.302612	22
19974	4.300465	22	20024	4.301551	21	20074	4.302634	22
		22			22			22
19975	4.300487	21	20025	4.301572	22	20075	4.302656	21
19976	4.300508	22	20026	4.301594	22	20076	4.302677	22
19977	4.300530	22	20027	4.301616	22	20077	4.302699	21
19978	4.300552	22	20028	4.301638	21	20078	4.302720	22
19979	4.300574	21	20029	4.301659	22	20079	4.302742	22
		22			22			22
19980	4.300595	22	20030	4.301681	22	20080	4.302764	21
19981	4.300617	22	20031	4.301703	21	20081	4.302785	22
19982	4.300639	22	20032	4.301724	22	20082	4.302807	22
19983	4.300661	21	20033	4.301746	22	20083	4.302829	21
19984	4.300682	22	20034	4.301768	21	20084	4.302850	22
		22			22			22
19985	4.300704	22	20035	4.301789	22	20085	4.302872	21
19986	4.300726	22	20036	4.301811	22	20086	4.302893	22
19987	4.300748	21	20037	4.301833	21	20087	4.302915	22
19988	4.300769	22	20038	4.301854	22	20088	4.302937	21
19989	4.300791	22	20039	4.301876	22	20089	4.302958	22
		22			22			22
19990	4.300813	21	20040	4.301898	21	20090	4.302980	22
19991	4.300834	22	20041	4.301919	22	20091	4.303002	21
19992	4.300856	22	20042	4.301941	22	20092	4.303023	22
19993	4.300878	22	20043	4.301963	21	20093	4.303045	21
19994	4.300900	21	20044	4.301984	22	20094	4.303066	22
		22			22			22
19995	4.300921	22	20045	4.302006	22	20095	4.303088	22
19996	4.300943	22	20046	4.302028	21	20096	4.303110	21
19997	4.300965	22	20047	4.302049	22	20097	4.303131	22
19998	4.300987	21	20048	4.302071	22	20098	4.303153	21
19999	4.301008	22	20049	4.302093	21	20099	4.303174	22
20000	4.301030		20050	4.302114		20100	4.303196	

Nomb.	5. 35' 0"	D.	Nomb.	5. 35' 50"	D.	Nomb.	5. 36' 40"	D.
20100	4.303196		20150	4.304275		20200	4.305351	
20101	4.303218	22	20151	4.304297	22	20201	4.305373	22
20102	4.303239	21	20152	4.304318	21	20202	4.305394	21
20103	4.303261	22	20153	4.304340	22	20203	4.305416	22
20104	4.303282	21	20154	4.304361	21	20204	4.305437	21
20105	4.303304	22	20155	4.304383	22	20205	4.305459	22
20106	4.303326	22	20156	4.304404	21	20206	4.305480	21
20107	4.303347	21	20157	4.304426	22	20207	4.305502	22
20108	4.303369	21	20158	4.304447	21	20208	4.305523	21
20109	4.303390	22	20159	4.304469	22	20209	4.305545	22
20110	4.303412	22	20160	4.304490	21	20210	4.305566	21
20111	4.303434	22	20161	4.304512	22	20211	4.305588	22
20112	4.303455	21	20162	4.304534	22	20212	4.305609	21
20113	4.303477	22	20163	4.304555	21	20213	4.305631	22
20114	4.303498	21	20164	4.304577	22	20214	4.305652	21
20115	4.303520	22	20165	4.304598	21	20215	4.305674	22
20116	4.303542	22	20166	4.304620	22	20216	4.305695	21
20117	4.303563	21	20167	4.304641	21	20217	4.305717	22
20118	4.303585	22	20168	4.304663	22	20218	4.305738	21
20119	4.303606	21	20169	4.304684	21	20219	4.305760	22
20120	4.303628	22	20170	4.304706	22	20220	4.305781	21
20121	4.303650	22	20171	4.304727	21	20221	4.305803	22
20122	4.303671	21	20172	4.304749	22	20222	4.305824	21
20123	4.303693	22	20173	4.304770	21	20223	4.305846	22
20124	4.303714	21	20174	4.304792	22	20224	4.305867	21
20125	4.303736	22	20175	4.304813	21	20225	4.305888	21
20126	4.303757	21	20176	4.304835	22	20226	4.305910	22
20127	4.303779	22	20177	4.304857	22	20227	4.305931	21
20128	4.303801	22	20178	4.304878	21	20228	4.305953	22
20129	4.303822	21	20179	4.304900	22	20229	4.305974	21
20130	4.303844	22	20180	4.304921	21	20230	4.305996	22
20131	4.303865	21	20181	4.304943	22	20231	4.306017	21
20132	4.303887	22	20182	4.304964	22	20232	4.306039	22
20133	4.303908	21	20183	4.304986	21	20233	4.306060	21
20134	4.303930	22	20184	4.305007	22	20234	4.306082	22
20135	4.303952	22	20185	4.305029	22	20235	4.306103	21
20136	4.303973	21	20186	4.305050	21	20236	4.306125	22
20137	4.303995	22	20187	4.305072	22	20237	4.306146	21
20138	4.304016	21	20188	4.305093	21	20238	4.306168	22
20139	4.304038	22	20189	4.305115	22	20239	4.306189	21
20140	4.304059	21	20190	4.305136	21	20240	4.306210	22
20141	4.304081	22	20191	4.305158	22	20241	4.306232	21
20142	4.304103	22	20192	4.305179	21	20242	4.306253	22
20143	4.304124	21	20193	4.305201	22	20243	4.306275	21
20144	4.304146	22	20194	4.305222	21	20244	4.306296	22
20145	4.304167	21	20195	4.305244	22	20245	4.306318	21
20146	4.304189	22	20196	4.305265	21	20246	4.306339	22
20147	4.304210	21	20197	4.305287	22	20247	4.306361	21
20148	4.304232	22	20198	4.305308	21	20248	4.306382	22
20149	4.304253	21	20199	4.305330	22	20249	4.306404	21
20150	4.304275	22	20200	4.305351	21	20250	4.306425	22

Nomb.	5. 37' 30"	D.	Nomb.	5. 38' 20"	D.	Nomb.	5. 39' 10"	D.
	Logarith.			Logarith.			Logarith.	
20250	4.306425		20300	4.307496		20350	4.308564	
20251	4.306446	21	20301	4.307517	21	20351	4.308586	22
20252	4.306468	22	20302	4.307539	22	20352	4.308607	21
20253	4.306489	21	20303	4.307560	21	20353	4.308628	21
20254	4.306511	22	20304	4.307582	22	20354	4.308650	22
20255	4.306532	21	20305	4.307603	21	20355	4.308671	21
20256	4.306554	22	20306	4.307624	21	20356	4.308692	21
20257	4.306575	21	20307	4.307646	22	20357	4.308714	22
20258	4.306597	22	20308	4.307667	21	20358	4.308735	21
20259	4.306618	21	20309	4.307688	21	20359	4.308756	21
20260	4.306639	21	20310	4.307710	22	20360	4.308778	22
20261	4.306661	22	20311	4.307731	21	20361	4.308799	21
20262	4.306682	21	20312	4.307753	22	20362	4.308820	21
20263	4.306704	22	20313	4.307774	21	20363	4.308842	22
20264	4.306725	21	20314	4.307795	21	20364	4.308863	21
20265	4.306747	22	20315	4.307817	22	20365	4.308884	21
20266	4.306768	21	20316	4.307838	21	20366	4.308906	22
20267	4.306789	21	20317	4.307860	22	20367	4.308927	21
20268	4.306811	22	20318	4.307881	21	20368	4.308948	21
20269	4.306832	21	20319	4.307902	21	20369	4.308970	22
20270	4.306854	22	20320	4.307924	22	20370	4.308991	21
20271	4.306875	21	20321	4.307945	21	20371	4.309012	21
20272	4.306897	22	20322	4.307966	21	20372	4.309034	22
20273	4.306918	21	20323	4.307988	22	20373	4.309055	21
20274	4.306939	21	20324	4.308009	21	20374	4.309076	21
20275	4.306961	22	20325	4.308031	22	20375	4.309098	22
20276	4.306982	21	20326	4.308052	21	20376	4.309119	21
20277	4.307004	22	20327	4.308073	21	20377	4.309140	22
20278	4.307025	21	20328	4.308095	22	20378	4.309162	22
20279	4.307046	21	20329	4.308116	21	20379	4.309183	21
20280	4.307068	22	20330	4.308137	21	20380	4.309204	21
20281	4.307089	21	20331	4.308159	22	20381	4.309225	21
20282	4.307111	22	20332	4.308180	21	20382	4.309247	22
20283	4.307132	21	20333	4.308201	21	20383	4.309268	21
20284	4.307154	22	20334	4.308223	22	20384	4.309289	21
20285	4.307175	21	20335	4.308244	21	20385	4.309311	22
20286	4.307196	21	20336	4.308265	21	20386	4.309332	2
20287	4.307218	22	20337	4.308287	22	20387	4.309353	21
20288	4.307239	21	20338	4.308308	21	20388	4.309375	22
20289	4.307261	22	20339	4.308330	22	20389	4.309396	21
20290	4.307282	21	20340	4.308351	21	20390	4.309417	21
20291	4.307303	21	20341	4.308372	21	20391	4.309438	22
20292	4.307325	22	20342	4.308394	22	20392	4.309460	21
20293	4.307346	21	20343	4.308415	21	20393	4.309481	21
20294	4.307368	22	20344	4.308436	21	20394	4.309502	21
20295	4.307389	21	20345	4.308458	22	20395	4.309524	22
20296	4.307410	21	20346	4.308479	21	20396	4.309545	21
20297	4.307432	22	20347	4.308500	21	20397	4.309566	21
20298	4.307453	21	20348	4.308522	22	20398	4.309588	22
20299	4.307475	22	20349	4.308543	21	20399	4.309609	21
20300	4.307496	21	20350	4.308564	21	20400	4.309630	21

Nomb.	5. 40' 0"	D.	Nomb.	5. 40' 50"	D.	Nomb.	5. 41' 40"	D.
20400	4.309630		20450	4.310693		20500	4.311754	
20401	4.309651	21	20451	4.310714	21	20501	4.311775	21
20402	4.309673	22	20452	4.310736	22	20502	4.311796	21
20403	4.309694	21	20453	4.310757	21	20503	4.311817	21
20404	4.309715	21	20454	4.310778	21	20504	4.311839	22
20405	4.309737	22	20455	4.310799	21	20505	4.311860	21
20406	4.309758	21	20456	4.310821	22	20506	4.311881	21
20407	4.309779	21	20457	4.310842	21	20507	4.311902	21
20408	4.309800	21	20458	4.310863	21	20508	4.311923	21
20409	4.309822	22	20459	4.310884	21	20509	4.311944	21
20410	4.309843	21	20460	4.310906	22	20510	4.311966	22
20411	4.309864	21	20461	4.310927	21	20511	4.311987	21
20412	4.309886	22	20462	4.310948	21	20512	4.312008	21
20413	4.309907	21	20463	4.310969	21	20513	4.312029	21
20414	4.309928	21	20464	4.310990	21	20514	4.312050	21
20415	4.309949	21	20465	4.311012	22	20515	4.312071	21
20416	4.309971	22	20466	4.311033	21	20516	4.312093	22
20417	4.309992	21	20467	4.311054	21	20517	4.312114	21
20418	4.310013	21	20468	4.311075	21	20518	4.312135	21
20419	4.310034	21	20469	4.311097	22	20519	4.312156	21
20420	4.310056	22	20470	4.311118	21	20520	4.312177	21
20421	4.310077	21	20471	4.311139	21	20521	4.312198	22
20422	4.310098	21	20472	4.311160	21	20522	4.312220	21
20423	4.310119	21	20473	4.311181	21	20523	4.312241	21
20424	4.310141	22	20474	4.311203	22	20524	4.312262	21
20425	4.310162	21	20475	4.311224	21	20525	4.312283	21
20426	4.310183	21	20476	4.311245	21	20526	4.312304	21
20427	4.310205	22	20477	4.311266	21	20527	4.312325	21
20428	4.310226	21	20478	4.311287	22	20528	4.312347	22
20429	4.310247	21	20479	4.311309	21	20529	4.312368	21
20430	4.310268	21	20480	4.311330	21	20530	4.312389	21
20431	4.310290	22	20481	4.311351	21	20531	4.312410	21
20432	4.310311	21	20482	4.311372	21	20532	4.312431	21
20433	4.310332	21	20483	4.311394	22	20533	4.312452	21
20434	4.310353	21	20484	4.311415	21	20534	4.312474	22
20435	4.310375	22	20485	4.311436	21	20535	4.312495	21
20436	4.310396	21	20486	4.311457	21	20536	4.312516	21
20437	4.310417	21	20487	4.311478	22	20537	4.312537	21
20438	4.310438	21	20488	4.311500	22	20538	4.312558	21
20439	4.310460	22	20489	4.311521	21	20539	4.312579	21
20440	4.310481	21	20490	4.311542	21	20540	4.312600	22
20441	4.310502	21	20491	4.311563	21	20541	4.312622	21
20442	4.310523	21	20492	4.311584	21	20542	4.312643	21
20443	4.310545	22	20493	4.311605	21	20543	4.312664	21
20444	4.310566	21	20494	4.311627	22	20544	4.312685	21
20445	4.310587	21	20495	4.311648	21	20545	4.312706	21
20446	4.310608	22	20496	4.311669	21	20546	4.312727	21
20447	4.310630	21	20497	4.311690	21	20547	4.312748	22
20448	4.310651	21	20498	4.311711	22	20548	4.312770	21
20449	4.310672	21	20499	4.311733	21	20549	4.312791	21
20450	4.310693	21	20500	4.311754	21	20550	4.312812	21

Nomb.	5. 42' 30"	D.	Nomb.	5. 43' 20"	D.	Nomb.	5. 44' 10"	D.
	Logarith.			Logarith.			Logarith.	
20550	4.312812		20600	4.313867		20650	4.314920	
20551	4.312833	21	20601	4.313888	21	20651	4.314941	21
20552	4.312854	21	20602	4.313909	21	20652	4.314962	21
20553	4.312875	21	20603	4.313930	21	20653	4.314983	21
20554	4.312896	21	20604	4.313951	21	20654	4.315004	21
20555	4.312917	21	20605	4.313973	22	20655	4.315025	21
20556	4.312939	22	20606	4.313994	21	20656	4.315046	21
20557	4.312960	21	20607	4.314015	21	20657	4.315067	21
20558	4.312981	21	20608	4.314036	21	20658	4.315088	21
20559	4.313002	21	20609	4.314057	21	20659	4.315109	21
20560	4.313023	21	20610	4.314078	21	20660	4.315130	21
20561	4.313044	21	20611	4.314099	21	20661	4.315151	21
20562	4.313065	21	20612	4.314120	21	20662	4.315172	21
20563	4.313086	21	20613	4.314141	21	20663	4.315193	21
20564	4.313108	22	20614	4.314162	21	20664	4.315214	21
20565	4.313129	21	20615	4.314183	21	20665	4.315235	21
20566	4.313150	21	20616	4.314204	21	20666	4.315256	21
20567	4.313171	21	20617	4.314225	21	20667	4.315277	21
20568	4.313192	21	20618	4.314246	21	20668	4.315298	21
20569	4.313213	21	20619	4.314268	22	20669	4.315319	21
20570	4.313234	21	20620	4.314289	21	20670	4.315340	21
20571	4.313255	21	20621	4.314310	21	20671	4.315361	21
20572	4.313276	21	20622	4.314331	21	20672	4.315382	21
20573	4.313298	22	20623	4.314352	21	20673	4.315403	21
20574	4.313319	21	20624	4.314373	21	20674	4.315424	21
20575	4.313340	21	20625	4.314394	21	20675	4.315445	21
20576	4.313361	21	20626	4.314415	21	20676	4.315466	21
20577	4.313382	21	20627	4.314436	21	20677	4.315487	21
20578	4.313403	21	20628	4.314457	21	20678	4.315508	21
20579	4.313424	21	20629	4.314478	21	20679	4.315529	21
20580	4.313445	21	20630	4.314499	21	20680	4.315550	21
20581	4.313466	21	20631	4.314520	21	20681	4.315571	21
20582	4.313488	22	20632	4.314541	21	20682	4.315592	21
20583	4.313509	21	20633	4.314562	21	20683	4.315613	21
20584	4.313530	21	20634	4.314583	21	20684	4.315634	21
20585	4.313551	21	20635	4.314604	21	20685	4.315655	21
20586	4.313572	21	20636	4.314625	21	20686	4.315676	21
20587	4.313593	21	20637	4.314647	22	20687	4.315697	21
20588	4.313614	21	20638	4.314668	21	20688	4.315718	21
20589	4.313635	21	20639	4.314689	21	20689	4.315739	21
20590	4.313656	21	20640	4.314710	21	20690	4.315760	21
20591	4.313677	21	20641	4.314731	21	20691	4.315781	21
20592	4.313698	22	20642	4.314752	21	20692	4.315802	21
20593	4.313720	21	20643	4.314773	21	20693	4.315823	21
20594	4.313741	21	20644	4.314794	21	20694	4.315844	21
20595	4.313762	21	20645	4.314815	21	20695	4.315865	21
20596	4.313783	21	20646	4.314836	21	20696	4.315886	21
20597	4.313804	21	20647	4.314857	21	20697	4.315907	21
20598	4.313825	21	20648	4.314878	21	20698	4.315928	21
20599	4.313846	21	20649	4.314899	21	20699	4.315949	21
20600	4.313867	21	20650	4.314920	21	20700	4.315970	21

Nomb.	5. 45' 0"	D.	Nomb.	5. 45' 50"	D.	Nomb.	5. 46' 40"	D.
	Logarith.			Logarith.			Logarith.	
20700	4.315970		20750	4.317018		20800	4.318063	
20701	4.315991	21	20751	4.317039	21	20801	4.318084	21
20702	4.316012	21	20752	4.317060	21	20802	4.318105	21
20703	4.316033	21	20753	4.317081	21	20803	4.318126	21
20704	4.316054	21	20754	4.317102	21	20804	4.318147	21
20705	4.316075	21	20755	4.317123	21	20805	4.318168	21
20706	4.316096	21	20756	4.317144	21	20806	4.318189	21
20707	4.316117	21	20757	4.317165	21	20807	4.318209	20
20708	4.316138	21	20758	4.317185	20	20808	4.318230	21
20709	4.316159	21	20759	4.317206	21	20809	4.318251	21
20710	4.316180	21	20760	4.317227	21	20810	4.318272	21
20711	4.316201	21	20761	4.317248	21	20811	4.318293	21
20712	4.316222	21	20762	4.317269	21	20812	4.318314	21
20713	4.316243	21	20763	4.317290	21	20813	4.318335	21
20714	4.316264	21	20764	4.317311	21	20814	4.318356	21
20715	4.316285	21	20765	4.317332	21	20815	4.318376	20
20716	4.316306	21	20766	4.317353	21	20816	4.318397	21
20717	4.316327	21	20767	4.317374	21	20817	4.318418	21
20718	4.316348	21	20768	4.317395	21	20818	4.318439	21
20719	4.316369	21	20769	4.317416	21	20819	4.318460	21
20720	4.316390	21	20770	4.317436	20	20820	4.318481	21
20721	4.316411	21	20771	4.317457	21	20821	4.318502	21
20722	4.316432	21	20772	4.317478	21	20822	4.318522	20
20723	4.316453	21	20773	4.317499	21	20823	4.318543	21
20724	4.316474	21	20774	4.317520	21	20824	4.318564	21
20725	4.316494	20	20775	4.317541	21	20825	4.318585	21
20726	4.316515	21	20776	4.317562	21	20826	4.318606	21
20727	4.316536	21	20777	4.317583	21	20827	4.318627	21
20728	4.316557	21	20778	4.317604	21	20828	4.318648	21
20729	4.316578	21	20779	4.317625	21	20829	4.318668	20
20730	4.316599	21	20780	4.317645	20	20830	4.318689	21
20731	4.316620	21	20781	4.317666	21	20831	4.318710	21
20732	4.316641	21	20782	4.317687	21	20832	4.318731	21
20733	4.316662	21	20783	4.317708	21	20833	4.318752	21
20734	4.316683	21	20784	4.317729	21	20834	4.318773	20
20735	4.316704	21	20785	4.317750	21	20835	4.318793	21
20736	4.316725	21	20786	4.317771	21	20836	4.318814	21
20737	4.316746	21	20787	4.317792	21	20837	4.318835	21
20738	4.316767	21	20788	4.317813	21	20838	4.318856	21
20739	4.316788	21	20789	4.317834	21	20839	4.318877	21
20740	4.316809	21	20790	4.317854	20	20840	4.318898	21
20741	4.316830	21	20791	4.317875	21	20841	4.318919	20
20742	4.316851	21	20792	4.317896	21	20842	4.318939	21
20743	4.316872	20	20793	4.317917	21	20843	4.318960	21
20744	4.316892	21	20794	4.317938	21	20844	4.318981	21
20745	4.316913	21	20795	4.317959	21	20845	4.319002	21
20746	4.316934	21	20796	4.317980	21	20846	4.319023	21
20747	4.316955	21	20797	4.318001	21	20847	4.319044	20
20748	4.316976	21	20798	4.318022	20	20848	4.319064	21
20749	4.316997	21	20799	4.318042	21	20849	4.319085	21
20750	4.317018		20800	4.318063		20850	4.319106	

Nomb.	5. 47' 30"	D.	Nomb.	5. 48' 20"	D.	Nomb.	5. 49' 10"	D.
	Logarith.			Logarith.			Logarith.	
20850	4.319106	21	20900	4.320146	21	20950	4.321184	21
20851	4.319127	21	20901	4.320167	21	20951	4.321205	21
20852	4.319148	21	20902	4.320188	21	20952	4.321225	20
20853	4.319168	20	20903	4.320209	21	20953	4.321246	21
20854	4.319189	21	20904	4.320229	20	20954	4.321267	21
20855	4.319210	21	20905	4.320250	21	20955	4.321288	21
20856	4.319231	21	20906	4.320271	21	20956	4.321308	20
20857	4.319252	21	20907	4.320292	21	20957	4.321329	21
20858	4.319273	21	20908	4.320312	20	20958	4.321350	21
20859	4.319293	20	20909	4.320333	21	20959	4.321371	21
20860	4.319314	21	20910	4.320354	21	20960	4.321391	20
20861	4.319335	21	20911	4.320375	21	20961	4.321412	21
20862	4.319356	21	20912	4.320396	21	20962	4.321433	21
20863	4.319377	21	20913	4.320416	20	20963	4.321453	20
20864	4.319398	21	20914	4.320437	21	20964	4.321474	21
20865	4.319418	20	20915	4.320458	21	20965	4.321495	21
20866	4.319439	21	20916	4.320479	21	20966	4.321516	21
20867	4.319460	21	20917	4.320499	20	20967	4.321536	20
20868	4.319481	21	20918	4.320520	21	20968	4.321557	21
20869	4.319502	21	20919	4.320541	21	20969	4.321578	21
20870	4.319522	20	20920	4.320562	21	20970	4.321598	20
20871	4.319543	21	20921	4.320582	20	20971	4.321619	21
20872	4.319564	21	20922	4.320603	21	20972	4.321640	21
20873	4.319585	21	20923	4.320624	21	20973	4.321661	21
20874	4.319606	21	20924	4.320645	21	20974	4.321681	20
20875	4.319626	20	20925	4.320665	20	20975	4.321702	21
20876	4.319647	21	20926	4.320686	21	20976	4.321723	21
20877	4.319668	21	20927	4.320707	21	20977	4.321743	20
20878	4.319689	21	20928	4.320728	21	20978	4.321764	21
20879	4.319710	21	20929	4.320748	20	20979	4.321785	21
20880	4.319730	20	20930	4.320769	21	20980	4.321805	20
20881	4.319751	21	20931	4.320790	21	20981	4.321826	21
20882	4.319772	21	20932	4.320811	21	20982	4.321847	21
20883	4.319793	21	20933	4.320831	20	20983	4.321868	21
20884	4.319814	21	20934	4.320852	21	20984	4.321888	20
20885	4.319834	20	20935	4.320873	21	20985	4.321909	21
20886	4.319855	21	20936	4.320894	21	20986	4.321930	21
20887	4.319876	21	20937	4.320914	20	20987	4.321950	20
20888	4.319897	21	20938	4.320935	21	20988	4.321971	21
20889	4.319918	21	20939	4.320956	21	20989	4.321992	21
20890	4.319938	20	20940	4.320977	21	20990	4.322012	20
20891	4.319959	21	20941	4.320997	20	20991	4.322033	21
20892	4.319980	21	20942	4.321018	21	20992	4.322054	21
20893	4.320001	21	20943	4.321039	21	20993	4.322074	20
20894	4.320022	21	20944	4.321060	21	20994	4.322095	21
20895	4.320042	20	20945	4.321080	20	20995	4.322116	21
20896	4.320063	21	20946	4.321101	21	20996	4.322137	21
20897	4.320084	21	20947	4.321122	21	20997	4.322157	20
20898	4.320105	21	20948	4.321143	21	20998	4.322178	21
20899	4.320125	20	20949	4.321163	20	20999	4.322199	21
20900	4.320146	21	20950	4.321184	21	21000	4.322219	20

Nomb.	5. 50' 0"	D.	Nomb.	5. 50' 50"	D.	Nomb.	5. 51' 40"	D.
Logarith.			Logarith.			Logarith.		
21000	4.322219	21	21050	4.323252	21	21100	4.324282	21
21001	4.322240	21	21051	4.323273	21	21101	4.324303	21
21002	4.322261	21	21052	4.323293	20	21102	4.324324	21
21003	4.322281	20	21053	4.323314	21	21103	4.324344	20
21004	4.322302	21	21054	4.323335	21	21104	4.324365	21
21005	4.322323	21	21055	4.323355	20	21105	4.324385	21
21006	4.322343	20	21056	4.323376	21	21106	4.324406	21
21007	4.322364	21	21057	4.323396	20	21107	4.324426	20
21008	4.322385	21	21058	4.323417	21	21108	4.324447	21
21009	4.322405	20	21059	4.323438	21	21109	4.324468	21
21010	4.322426	21	21060	4.323458	20	21110	4.324488	20
21011	4.322447	21	21061	4.323479	21	21111	4.324509	21
21012	4.322467	20	21062	4.323500	21	21112	4.324529	20
21013	4.322488	21	21063	4.323520	20	21113	4.324550	21
21014	4.322509	21	21064	4.323541	21	21114	4.324570	20
21015	4.322529	20	21065	4.323561	20	21115	4.324591	21
21016	4.322550	21	21066	4.323582	21	21116	4.324612	21
21017	4.322571	21	21067	4.323603	21	21117	4.324632	20
21018	4.322591	20	21068	4.323623	20	21118	4.324653	21
21019	4.322612	21	21069	4.323644	21	21119	4.324673	20
21020	4.322633	21	21070	4.323664	20	21120	4.324694	21
21021	4.322653	20	21071	4.323685	21	21121	4.324714	20
21022	4.322674	21	21072	4.323706	21	21122	4.324735	21
21023	4.322695	21	21073	4.323726	20	21123	4.324756	21
21024	4.322715	20	21074	4.323747	21	21124	4.324776	20
21025	4.322736	21	21075	4.323768	21	21125	4.324797	21
21026	4.322757	21	21076	4.323788	20	21126	4.324817	20
21027	4.322777	20	21077	4.323809	21	21127	4.324838	21
21028	4.322798	21	21078	4.323829	20	21128	4.324858	20
21029	4.322819	21	21079	4.323850	21	21129	4.324879	21
21030	4.322839	20	21080	4.323871	21	21130	4.324899	20
21031	4.322860	21	21081	4.323891	20	21131	4.324920	21
21032	4.322881	21	21082	4.323912	21	21132	4.324941	21
21033	4.322901	20	21083	4.323932	20	21133	4.324961	20
21034	4.322922	21	21084	4.323953	21	21134	4.324982	21
21035	4.322943	21	21085	4.323974	21	21135	4.325002	20
21036	4.322963	20	21086	4.323994	20	21136	4.325023	21
21037	4.322984	21	21087	4.324015	21	21137	4.325043	21
21038	4.323004	20	21088	4.324035	20	21138	4.325064	20
21039	4.323025	21	21089	4.324056	21	21139	4.325084	21
21040	4.323046	21	21090	4.324077	21	21140	4.325105	20
21041	4.323066	20	21091	4.324097	20	21141	4.325125	21
21042	4.323087	21	21092	4.324118	21	21142	4.325146	21
21043	4.323108	21	21093	4.324138	20	21143	4.325167	20
21044	4.323128	20	21094	4.324159	21	21144	4.325187	21
21045	4.323149	21	21095	4.324179	20	21145	4.325208	21
21046	4.323170	21	21096	4.324200	21	21146	4.325228	20
21047	4.323190	20	21097	4.324221	21	21147	4.325249	21
21048	4.323211	21	21098	4.324241	20	21148	4.325269	21
21049	4.323231	20	21099	4.324262	21	21149	4.325290	20
21050	4.323252	21	21100	4.324282	20	21150	4.325310	20

Nomb.	5. 52' 30"	D.	Nomb.	5. 53' 20"	D.	Nomb.	5. 54' 10"	D.
	Logarith.			Logarith.			Logarith.	
21150	4.325310	21	21200	4.326336	20	21250	4.327359	20
21151	4.325331	21	21201	4.326356	21	21251	4.327379	21
21152	4.325351	20	21202	4.326377	21	21252	4.327400	21
21153	4.325372	21	21203	4.326397	20	21253	4.327420	20
21154	4.325392	20	21204	4.326418	21	21254	4.327441	21
21155	4.325413	21	21205	4.326438	20	21255	4.327461	20
21156	4.325434	21	21206	4.326459	21	21256	4.327481	21
21157	4.325454	20	21207	4.326479	20	21257	4.327502	21
21158	4.325475	21	21208	4.326500	21	21258	4.327522	20
21159	4.325495	20	21209	4.326520	20	21259	4.327543	21
21160	4.325516	21	21210	4.326541	21	21260	4.327563	20
21161	4.325536	20	21211	4.326561	21	21261	4.327584	21
21162	4.325557	20	21212	4.326582	21	21262	4.327604	20
21163	4.325577	20	21213	4.326602	20	21263	4.327624	20
21164	4.325598	21	21214	4.326623	21	21264	4.327645	21
21165	4.325618	20	21215	4.326643	20	21265	4.327665	20
21166	4.325639	21	21216	4.326663	20	21266	4.327686	21
21167	4.325659	20	21217	4.326684	21	21267	4.327706	21
21168	4.325680	21	21218	4.326704	20	21268	4.327727	20
21169	4.325700	20	21219	4.326725	21	21269	4.327747	20
21170	4.325721	21	21220	4.326745	20	21270	4.327767	21
21171	4.325741	20	21221	4.326766	21	21271	4.327788	21
21172	4.325762	21	21222	4.326786	20	21272	4.327808	20
21173	4.325782	20	21223	4.326807	21	21273	4.327829	21
21174	4.325803	21	21224	4.326827	20	21274	4.327849	21
21175	4.325823	20	21225	4.326848	21	21275	4.327870	21
21176	4.325844	21	21226	4.326868	20	21276	4.327890	20
21177	4.325864	20	21227	4.326889	21	21277	4.327910	20
21178	4.325885	21	21228	4.326909	20	21278	4.327931	21
21179	4.325905	20	21229	4.326929	20	21279	4.327951	21
21180	4.325926	21	21230	4.326950	21	21280	4.327972	21
21181	4.325946	20	21231	4.326970	20	21281	4.327992	20
21182	4.325967	21	21232	4.326991	21	21282	4.328012	20
21183	4.325987	20	21233	4.327011	20	21283	4.328033	21
21184	4.326008	21	21234	4.327032	21	21284	4.328053	21
21185	4.326028	20	21235	4.327052	20	21285	4.328074	20
21186	4.326049	21	21236	4.327073	21	21286	4.328094	20
21187	4.326069	20	21237	4.327093	20	21287	4.328114	21
21188	4.326090	21	21238	4.327114	21	21288	4.328135	21
21189	4.326110	20	21239	4.327134	20	21289	4.328156	21
21190	4.326131	21	21240	4.327155	21	21290	4.328176	20
21191	4.326151	20	21241	4.327175	20	21291	4.328196	21
21192	4.326172	21	21242	4.327195	21	21292	4.328216	21
21193	4.326192	20	21243	4.327216	21	21293	4.328237	21
21194	4.326213	21	21244	4.327236	20	21294	4.328257	20
21195	4.326233	20	21245	4.327257	21	21295	4.328278	21
21196	4.326254	21	21246	4.327277	20	21296	4.328298	20
21197	4.326274	20	21247	4.327298	21	21297	4.328318	21
21198	4.326295	21	21248	4.327318	20	21298	4.328339	21
21199	4.326315	20	21249	4.327339	21	21299	4.328359	20
21200	4.326336	21	21250	4.327359	20	21300	4.328380	21

Nomb.	5. 55' 0"	D.	Nomb.	5. 55' 50"	D.	Nomb.	5. 56' 40"	D.
	Logarith.			Logarith.			Logarith.	
21300	4.328380	20	21350	4.329398	20	21400	4.330414	20
21301	4.328400	20	21351	4.329418	21	21401	4.330434	20
21302	4.328420	20	21352	4.329439	21	21402	4.330454	21
21303	4.328441	21	21353	4.329459	20	21403	4.330475	21
21304	4.328461	20	21354	4.329479	20	21404	4.330495	20
21305	4.328481	20	21355	4.329500	21	21405	4.330515	20
21306	4.328502	21	21356	4.329520	20	21406	4.330535	20
21307	4.328522	20	21357	4.329540	20	21407	4.330556	21
21308	4.328543	21	21358	4.329561	21	21408	4.330576	20
21309	4.328563	20	21359	4.329581	20	21409	4.330596	20
21310	4.328583	20	21360	4.329601	20	21410	4.330617	21
21311	4.328604	21	21361	4.329622	21	21411	4.330637	20
21312	4.328624	20	21362	4.329642	20	21412	4.330657	20
21313	4.328645	21	21363	4.329662	20	21413	4.330677	20
21314	4.328665	20	21364	4.329683	21	21414	4.330698	21
21315	4.328685	20	21365	4.329703	20	21415	4.330718	20
21316	4.328706	21	21366	4.329723	20	21416	4.330738	20
21317	4.328726	20	21367	4.329744	21	21417	4.330759	21
21318	4.328746	20	21368	4.329764	20	21418	4.330779	20
21319	4.328767	21	21369	4.329784	20	21419	4.330799	20
21320	4.328787	20	21370	4.329804	20	21420	4.330819	20
21321	4.328808	21	21371	4.329825	21	21421	4.330840	21
21322	4.328828	20	21372	4.329845	20	21422	4.330860	20
21323	4.328848	20	21373	4.329865	21	21423	4.330880	20
21324	4.328869	21	21374	4.329886	21	21424	4.330901	21
21325	4.328889	20	21375	4.329906	20	21425	4.330921	20
21326	4.328909	20	21376	4.329926	21	21426	4.330941	20
21327	4.328930	21	21377	4.329947	21	21427	4.330961	20
21328	4.328950	20	21378	4.329967	20	21428	4.330982	21
21329	4.328970	20	21379	4.329987	20	21429	4.331002	20
21330	4.328991	21	21380	4.330008	21	21430	4.331022	20
21331	4.329011	20	21381	4.330028	20	21431	4.331042	20
21332	4.329032	21	21382	4.330048	20	21432	4.331063	21
21333	4.329052	20	21383	4.330069	21	21433	4.331083	20
21334	4.329072	20	21384	4.330089	20	21434	4.331103	20
21335	4.329093	21	21385	4.330109	21	21435	4.331123	20
21336	4.329113	20	21386	4.330130	21	21436	4.331144	21
21337	4.329133	20	21387	4.330150	20	21437	4.331164	20
21338	4.329154	21	21388	4.330170	20	21438	4.331184	20
21339	4.329174	20	21389	4.330190	20	21439	4.331204	21
21340	4.329194	20	21390	4.330211	21	21440	4.331225	20
21341	4.329215	21	21391	4.330231	20	21441	4.331245	20
21342	4.329235	20	21392	4.330251	21	21442	4.331265	20
21343	4.329255	20	21393	4.330272	21	21443	4.331285	21
21344	4.329276	21	21394	4.330292	20	21444	4.331306	20
21345	4.329296	20	21395	4.330312	20	21445	4.331326	20
21346	4.329316	21	21396	4.330333	21	21446	4.331346	21
21347	4.329337	20	21397	4.330353	20	21447	4.331367	20
21348	4.329357	20	21398	4.330373	20	21448	4.331387	20
21349	4.329377	21	21399	4.330393	21	21449	4.331407	20
21350	4.329398	21	21400	4.330414	21	21450	4.331427	20

Nomb.	5. 57' 30"	D.	Nomb.	5. 58' 20"	D.	Nomb.	5. 59' 10"	D.
	Logarith.			Logarith.			Logarith.	
21450	4.331427	20	21500	4.332438	21	21550	4.333447	20
21451	4.331447	21	21501	4.332459	20	21551	4.333467	21
21452	4.331468	21	21502	4.332479	20	21552	4.333488	21
21453	4.331488	20	21503	4.332499	20	21553	4.333508	20
21454	4.331508	20	21504	4.332519	20	21554	4.333528	20
21455	4.331528	20	21505	4.332539	20	21555	4.333548	20
21456	4.331549	21	21506	4.332560	21	21556	4.333568	20
21457	4.331569	20	21507	4.332580	20	21557	4.333588	20
21458	4.331589	20	21508	4.332600	20	21558	4.333608	20
21459	4.331609	20	21509	4.332620	20	21559	4.333629	21
21460	4.331630	21	21510	4.332640	20	21560	4.333649	20
21461	4.331650	20	21511	4.332661	21	21561	4.333669	20
21462	4.331670	20	21512	4.332681	20	21562	4.333689	20
21463	4.331690	20	21513	4.332701	20	21563	4.333709	20
21464	4.331711	21	21514	4.332721	20	21564	4.333729	20
21465	4.331731	20	21515	4.332741	20	21565	4.333749	20
21466	4.331751	20	21516	4.332761	20	21566	4.333770	21
21467	4.331771	20	21517	4.332782	21	21567	4.333790	20
21468	4.331792	21	21518	4.332802	20	21568	4.333810	20
21469	4.331812	20	21519	4.332822	20	21569	4.333830	20
21470	4.331832	20	21520	4.332842	20	21570	4.333850	20
21471	4.331852	20	21521	4.332862	20	21571	4.333870	20
21472	4.331872	20	21522	4.332883	21	21572	4.333890	20
21473	4.331893	21	21523	4.332903	20	21573	4.333910	20
21474	4.331913	20	21524	4.332923	20	21574	4.333931	21
21475	4.331933	20	21525	4.332943	20	21575	4.333951	20
21476	4.331953	20	21526	4.332963	20	21576	4.333971	20
21477	4.331974	21	21527	4.332983	20	21577	4.333991	20
21478	4.331994	20	21528	4.333004	21	21578	4.334011	20
21479	4.332014	20	21529	4.333024	20	21579	4.334031	20
21480	4.332034	20	21530	4.333044	20	21580	4.334051	21
21481	4.332054	20	21531	4.333064	20	21581	4.334072	20
21482	4.332075	21	21532	4.333084	20	21582	4.334092	20
21483	4.332095	20	21533	4.333104	21	21583	4.334112	20
21484	4.332115	20	21534	4.333125	20	21584	4.334132	20
21485	4.332135	21	21535	4.333145	20	21585	4.334152	20
21486	4.332156	20	21536	4.333165	20	21586	4.334172	20
21487	4.332176	20	21537	4.333185	20	21587	4.334192	20
21488	4.332196	20	21538	4.333205	20	21588	4.334212	20
21489	4.332216	20	21539	4.333225	21	21589	4.334232	21
21490	4.332236	21	21540	4.333246	20	21590	4.334253	20
21491	4.332257	20	21541	4.333266	20	21591	4.334273	20
21492	4.332277	20	21542	4.333286	20	21592	4.334293	20
21493	4.332297	20	21543	4.333306	20	21593	4.334313	20
21494	4.332317	20	21544	4.333326	21	21594	4.334333	20
21495	4.332337	21	21545	4.333347	20	21595	4.334353	20
21496	4.332358	20	21546	4.333367	20	21596	4.334373	20
21497	4.332378	20	21547	4.333387	20	21597	4.334393	20
21498	4.332398	20	21548	4.333407	20	21598	4.334413	21
21499	4.332418	20	21549	4.333427	20	21599	4.334434	20
21500	4.332438	20	21550	4.333447	20	21600	4.334454	20

Nomb.	6. 0' 0"	D.	Nomb.	6. 0' 50"	D.	Nomb.	6. 1' 40"	D.
Logarith.			Logarith.			Logarith.		
21600	4.334454	20	21650	4.335458	20	21700	4.336460	20
21601	4.334474	20	21651	4.335478	20	21701	4.336480	20
21602	4.334494	20	21652	4.335498	20	21702	4.336500	20
21603	4.334514	20	21653	4.335518	20	21703	4.336520	20
21604	4.334534	20	21654	4.335538	20	21704	4.336540	20
21605	4.334554	20	21655	4.335558	20	21705	4.336560	20
21606	4.334574	20	21656	4.335578	20	21706	4.336580	20
21607	4.334594	20	21657	4.335598	20	21707	4.336600	20
21608	4.334615	21	21658	4.335618	20	21708	4.336620	20
21609	4.334635	20	21659	4.335638	20	21709	4.336640	20
21610	4.334655	20	21660	4.335658	20	21710	4.336660	20
21611	4.334675	20	21661	4.335678	20	21711	4.336680	20
21612	4.334695	20	21662	4.335699	21	21712	4.336700	20
21613	4.334715	20	21663	4.335719	20	21713	4.336720	20
21614	4.334735	20	21664	4.335739	20	21714	4.336740	20
21615	4.334755	20	21665	4.335759	20	21715	4.336760	20
21616	4.334775	20	21666	4.335779	20	21716	4.336780	20
21617	4.334795	20	21667	4.335799	20	21717	4.336800	20
21618	4.334815	20	21668	4.335819	20	21718	4.336820	20
21619	4.334836	21	21669	4.335839	20	21719	4.336840	20
21620	4.334856	20	21670	4.335859	20	21720	4.336860	20
21621	4.334876	20	21671	4.335879	20	21721	4.336880	20
21622	4.334896	20	21672	4.335899	20	21722	4.336900	20
21623	4.334916	20	21673	4.335919	20	21723	4.336920	20
21624	4.334936	20	21674	4.335939	20	21724	4.336940	20
21625	4.334956	20	21675	4.335959	20	21725	4.336960	20
21626	4.334976	20	21676	4.335979	20	21726	4.336980	20
21627	4.334996	20	21677	4.335999	20	21727	4.337000	20
21628	4.335016	20	21678	4.336019	20	21728	4.337020	20
21629	4.335036	20	21679	4.336039	20	21729	4.337040	20
21630	4.335056	21	21680	4.336059	20	21730	4.337060	20
21631	4.335077	20	21681	4.336079	20	21731	4.337080	20
21632	4.335097	20	21682	4.336099	20	21732	4.337100	20
21633	4.335117	20	21683	4.336119	20	21733	4.337120	20
21634	4.335137	20	21684	4.336139	20	21734	4.337140	20
21635	4.335157	20	21685	4.336159	20	21735	4.337160	20
21636	4.335177	20	21686	4.336179	20	21736	4.337180	20
21637	4.335197	20	21687	4.336199	20	21737	4.337200	20
21638	4.335217	20	21688	4.336219	20	21738	4.337220	20
21639	4.335237	20	21689	4.336239	21	21739	4.337240	20
21640	4.335257	20	21690	4.336260	20	21740	4.337260	20
21641	4.335277	20	21691	4.336280	20	21741	4.337280	20
21642	4.335297	20	21692	4.336300	20	21742	4.337300	20
21643	4.335317	20	21693	4.336320	20	21743	4.337319	19
21644	4.335337	21	21694	4.336340	20	21744	4.337339	20
21645	4.335358	20	21695	4.336360	20	21745	4.337359	20
21646	4.335378	20	21696	4.336380	20	21746	4.337379	20
21647	4.335398	20	21697	4.336400	20	21747	4.337399	20
21648	4.335418	20	21698	4.336420	20	21748	4.337419	20
21649	4.335438	20	21699	4.336440	20	21749	4.337439	20
21650	4.335458	20	21700	4.336460	20	21750	4.337459	20



TABLES
DE
LOGARITHMES

DES SINUS, COSINUS, TANGENTES
ET COTANGENTES,

POUR CHAQUE MINUTE DU QUART DE CERCLE.

I	Sin. O		4-685		Tang. O		Coang. O		Cosin. O	
	Inf. neg.		Inf. neg.		Inf. neg.		Inf. posit.			
0	6.463726	575	575	6.463726	575	3.536274	0.000000	60		
1	6.764756	575	575	6.764756	575	3.235244	0.000000	59		
2	6.940817	575	575	6.940817	575	3.059153	0.000000	58		
3	7.065786	575	575	7.065786	575	2.934214	0.000000	57		
4	7.162696	575	575	7.162696	575	2.837304	9.999999	56		
5	7.241877	575	575	7.241877	575	2.758122	9.999999	55		
6	7.308824	575	575	7.308824	575	2.691175	9.999999	54		
7	7.366816	575	576	7.366816	576	2.633183	9.999999	53		
8	7.417968	574	576	7.417970	576	2.582030	9.999998	52		
9	7.463725	574	576	7.463727	576	2.536273	9.999998	51		
10	7.505118	574	576	7.505120	576	2.494880	9.999998	50		
11	7.542906	574	576	7.542909	576	2.457091	9.999997	49		
12	7.577668	574	577	7.577672	577	2.422328	9.999997	48		
13	7.609853	574	577	7.609857	577	2.390143	9.999996	47		
14	7.639816	574	577	7.639820	577	2.360180	9.999996	46		
15	7.667844	573	578	7.667849	578	2.332151	9.999995	45		
16	7.694173	573	578	7.694179	578	2.305821	9.999995	44		
17	7.718997	573	579	7.719003	579	2.280997	9.999994	43		
18	7.742477	573	579	7.742484	579	2.257516	9.999993	42		
19	7.764754	573	580	7.764761	580	2.235239	9.999993	41		
20	7.785943	572	580	7.785951	580	2.214049	9.999992	40		
21	7.806146	572	581	7.806153	581	2.193845	9.999991	39		
22	7.825451	572	581	7.825460	581	2.174540	9.999990	38		
23	7.843934	571	582	7.843944	582	2.156056	9.999989	37		
24	7.861662	571	582	7.861674	582	2.138326	9.999989	36		
25	7.878695	571	583	7.878708	583	2.121292	9.999988	35		
26	7.895085	570	583	7.895099	583	2.104901	9.999987	34		
27	7.910879	570	584	7.910894	584	2.089106	9.999986	33		
28	7.926119	570	585	7.926134	585	2.073866	9.999984	32		
29	7.940842	569	585	7.940858	585	2.059142	9.999983	31		
30	7.955082	569	587	7.955100	587	2.044900	9.999982	30		
31	7.968870	568	588	7.968889	588	2.031111	9.999981	29		
32	7.982233	568	589	7.982253	589	2.017747	9.999980	28		
33	7.995198	568	589	7.995219	589	2.004781	9.999979	27		
34	8.007787	567	590	8.007809	590	1.992191	9.999977	26		
35	8.020021	567	591	8.020044	591	1.979956	9.999976	25		
36	8.031919	566	592	8.031945	592	1.968055	9.999975	24		
37	8.043501	566	593	8.043527	593	1.956473	9.999973	23		
38	8.054781	566	594	8.054809	594	1.945191	9.999972	22		
39	8.065776	565	595	8.065806	595	1.934194	9.999971	21		
40	8.076500	565	596	8.076531	596	1.923469	9.999969	20		
41	8.086965	564	597	8.086997	597	1.913003	9.999968	19		
42	8.097183	564	598	8.097217	598	1.902783	9.999966	18		
43	8.107167	563	599	8.107203	599	1.892797	9.999964	17		
44	8.116926	562	600	8.116963	600	1.883037	9.999963	16		
45	8.126471	562	601	8.126510	601	1.873490	9.999961	15		
46	8.135810	561	602	8.135851	602	1.864149	9.999959	14		
47	8.144953	561	603	8.144996	603	1.855004	9.999958	13		
48	8.153907	560	604	8.153952	604	1.846048	9.999956	12		
49	8.162681	559	605	8.162727	605	1.837273	9.999954	11		
50	8.171280	559	606	8.171328	606	1.828672	9.999952	10		
51	8.179713	558	608	8.179763	608	1.820237	9.999950	9		
52	8.187985	558	609	8.188036	609	1.811964	9.999948	8		
53	8.196102	557	610	8.196156	610	1.803844	9.999946	7		
54	8.204070	556	611	8.204126	611	1.795874	9.999944	6		
55	8.211895	556	613	8.211953	613	1.788047	9.999942	5		
56	8.219581	555	614	8.219641	614	1.780359	9.999940	4		
57	8.227133	554	616	8.227195	616	1.772805	9.999938	3		
58	8.234557	553	617	8.234621	617	1.765379	9.999936	2		
59	8.241855	553	619	8.241921	619	1.758079	9.999934	1		
60								0		
	Cosin. 89		Coang. 89		Tang. 89		Sin. 89			

<i>t</i>	Sin. I	4-685	Tang. I	Cotang. I	Cosin. I		
0	8.241855	553	619	8.241921	1.758079	9.999934	60
1	8.249033	552	620	8.249102	1.750898	9.999932	59
2	8.256094	551	622	8.256165	1.743833	9.999929	58
3	8.263042	550	623	8.263115	1.736885	9.999927	57
4	8.269881	550	625	8.269956	1.730044	9.999925	56
5	8.276614	549	626	8.276691	1.723309	9.999922	55
6	8.283243	548	628	8.283323	1.716677	9.999920	54
7	8.289773	547	630	8.289856	1.710144	9.999918	53
8	8.296207	546	631	8.296292	1.703708	9.999915	52
9	8.302546	546	633	8.302634	1.697366	9.999913	51
10	8.308794	545	635	8.308884	1.691116	9.999910	50
11	8.314954	544	636	8.315046	1.684954	9.999907	49
12	8.321027	543	638	8.321122	1.678878	9.999905	48
13	8.327016	542	640	8.327114	1.672886	9.999902	47
14	8.332924	541	641	8.333025	1.666975	9.999899	46
15	8.338753	540	643	8.338856	1.661144	9.999897	45
16	8.344504	539	645	8.344610	1.655390	9.999894	44
17	8.350181	539	647	8.350289	1.649711	9.999891	43
18	8.355783	538	649	8.355895	1.644105	9.999888	42
19	8.361315	537	651	8.361430	1.638570	9.999885	41
20	8.366777	536	653	8.366895	1.633105	9.999882	40
21	8.372171	535	655	8.372292	1.627708	9.999879	39
22	8.377499	534	657	8.377622	1.622378	9.999876	38
23	8.382762	533	659	8.382889	1.617111	9.999873	37
24	8.387962	532	661	8.388092	1.611908	9.999870	36
25	8.393101	531	663	8.393234	1.606766	9.999867	35
26	8.398179	530	665	8.398315	1.601685	9.999864	34
27	8.403199	528	667	8.403338	1.596662	9.999861	33
28	8.408161	527	669	8.408304	1.591696	9.999858	32
29	8.413068	526	671	8.413213	1.586787	9.999854	31
30	8.417919	525	673	8.418008	1.581932	9.999851	30
31	8.422717	524	675	8.422869	1.577131	9.999848	29
32	8.427462	523	677	8.427618	1.572382	9.999844	28
33	8.432156	522	679	8.432315	1.567685	9.999841	27
34	8.436800	521	681	8.436962	1.563038	9.999838	26
35	8.441394	520	684	8.441560	1.558440	9.999834	25
36	8.445941	518	686	8.446110	1.553890	9.999831	24
37	8.450440	517	689	8.450613	1.549387	9.999827	23
38	8.454893	516	692	8.455070	1.544930	9.999824	22
39	8.459301	515	694	8.459481	1.540519	9.999820	21
40	8.463665	514	697	8.463849	1.536151	9.999816	20
41	8.467985	512	700	8.468172	1.531828	9.999813	19
42	8.472263	511	702	8.472454	1.527546	9.999809	18
43	8.476498	510	705	8.476693	1.523307	9.999805	17
44	8.480693	509	707	8.480892	1.519108	9.999801	16
45	8.484848	507	710	8.485050	1.514950	9.999797	15
46	8.488963	506	712	8.489170	1.510830	9.999794	14
47	8.493040	505	715	8.493250	1.506750	9.999790	13
48	8.497078	504	717	8.497293	1.502707	9.999786	12
49	8.501080	502	720	8.501298	1.498702	9.999782	11
50	8.505045	501	723	8.505267	1.494733	9.999778	10
51	8.508974	500	725	8.509200	1.490800	9.999774	9
52	8.512867	498	728	8.513098	1.486902	9.999769	8
53	8.516720	497	731	8.516961	1.483039	9.999765	7
54	8.520551	495	733	8.520790	1.479210	9.999761	6
55	8.524343	494	736	8.524586	1.475414	9.999757	5
56	8.528102	493	739	8.528349	1.471651	9.999753	4
57	8.531828	491	742	8.532080	1.467920	9.999748	3
58	8.535523	490	745	8.535779	1.464221	9.999744	2
59	8.539186	488	748	8.539447	1.460553	9.999740	1
60	8.542819	487	751	8.543084	1.456916	9.999735	0.
	Cosin. 88		Cotang. 88	Tang. 88		Sin. 88	<i>t</i>

r	Sin. 2	4-685	Tang. 2	Cotang. 2	Cosin. 2		
0	8.542819	487	751	8.543084	1.436916	9.999735	60
1	8.546422	485	754	8.546691	1.453309	9.999731	59
2	8.549995	484	757	8.550268	1.449732	9.999726	58
3	8.553539	482	760	8.553817	1.446183	9.999722	57
4	8.557054	481	763	8.557336	1.442664	9.999717	56
5	8.560540	479	766	8.560828	1.439172	9.999713	55
6	8.563999	478	769	8.564291	1.435709	9.999708	54
7	8.567431	476	772	8.567727	1.432273	9.999704	53
8	8.570836	475	776	8.571137	1.428863	9.999699	52
9	8.574214	473	779	8.574520	1.425480	9.999694	51
10	8.577566	471	782	8.577877	1.422123	9.999689	50
11	8.580892	470	785	8.581208	1.418792	9.999685	49
12	8.584193	468	788	8.584514	1.415486	9.999680	48
13	8.587469	466	792	8.587795	1.412205	9.999675	47
14	8.590721	465	795	8.591051	1.408949	9.999670	46
15	8.593948	463	798	8.594283	1.405717	9.999665	45
16	8.597152	461	802	8.597492	1.402508	9.999660	44
17	8.600332	460	805	8.600677	1.399323	9.999655	43
18	8.603489	458	808	8.603839	1.396161	9.999650	42
19	8.606623	456	812	8.606978	1.393022	9.999645	41
20	8.609734	455	815	8.610094	1.389906	9.999640	40
21	8.612823	453	819	8.613189	1.386811	9.999635	39
22	8.615891	451	822	8.616262	1.383738	9.999630	38
23	8.618937	450	826	8.619313	1.380687	9.999624	37
24	8.621962	448	829	8.622343	1.377657	9.999619	36
25	8.624965	446	832	8.625352	1.374648	9.999614	35
26	8.627948	444	835	8.628340	1.371660	9.999608	34
27	8.630911	442	839	8.631308	1.368692	9.999603	33
28	8.633854	441	843	8.634256	1.365744	9.999597	32
29	8.636776	439	847	8.637184	1.362816	9.999592	31
30	8.639680	437	851	8.640093	1.359907	9.999586	30
31	8.642563	435	854	8.642982	1.357018	9.999581	29
32	8.645428	434	858	8.645853	1.354147	9.999575	28
33	8.648274	432	862	8.648704	1.351296	9.999570	27
34	8.651102	430	866	8.651537	1.348463	9.999564	26
35	8.653911	428	869	8.654352	1.345648	9.999558	25
36	8.656702	426	873	8.657149	1.342851	9.999553	24
37	8.659475	424	877	8.659928	1.340072	9.999547	23
38	8.662230	422	881	8.662689	1.337311	9.999541	22
39	8.664968	420	885	8.665433	1.334567	9.999535	21
40	8.667689	418	889	8.668160	1.331840	9.999529	20
41	8.670393	416	892	8.670870	1.329130	9.999524	19
42	8.673080	414	896	8.673563	1.326437	9.999518	18
43	8.675751	412	900	8.676239	1.323761	9.999512	17
44	8.678405	410	904	8.678900	1.321100	9.999506	16
45	8.681043	408	908	8.681544	1.318456	9.999500	15
46	8.683665	406	912	8.684172	1.315828	9.999493	14
47	8.686272	404	916	8.686784	1.313216	9.999487	13
48	8.688863	402	920	8.689381	1.310619	9.999481	12
49	8.691438	400	925	8.691963	1.308037	9.999475	11
50	8.693998	398	929	8.694529	1.305471	9.999469	10
51	8.696543	396	933	8.697081	1.302919	9.999463	9
52	8.699073	394	937	8.699617	1.300383	9.999456	8
53	8.701589	392	942	8.702139	1.297861	9.999450	7
54	8.704090	390	946	8.704646	1.295354	9.999443	6
55	8.706577	387	950	8.707140	1.292860	9.999437	5
56	8.709049	385	955	8.709618	1.290382	9.999431	4
57	8.711507	383	959	8.712083	1.287917	9.999424	3
58	8.713952	381	963	8.714534	1.285465	9.999418	2
59	8.716383	379	968	8.716972	1.283028	9.999411	1
60	8.718800	376	972	8.719396	1.280604	9.999404	0
	Cosin. 87		Cotang. 87	Tang. 87	Sin. 87		

	Sin. 3	1"	Tang. 3	1"	Cotang. 3	Cosin. 3	1"	
0	8.718800		8.719396		1.280604	9.999404		60
1	8.721204	39.63	8.721806	39.74	1.278894	9.999398	00.11	59
2	8.723595		8.724204		1.276796	9.999391		58
3	8.725972		8.726588		1.273412	9.999384		57
4	8.728337		8.728959		1.271041	9.999378		56
5	8.730688		8.731317		1.268683	9.999371		55
6	8.733027	38.57	8.733663	38.68	1.266337	9.999364	00.12	54
7	8.735354		8.735996		1.264004	9.999357		53
8	8.737667		8.738317		1.261683	9.999350		52
9	8.739969		8.740626		1.259374	9.999343		51
10	8.742259		8.742922		1.257078	9.999336		50
11	8.744536	37.56	8.745207	37.68	1.254793	9.999329	00.13	49
12	8.746802		8.747479		1.252521	9.999322		48
13	8.749055		8.749740		1.250260	9.999315		47
14	8.751297		8.751989		1.248011	9.999308		46
15	8.753528	36.61	8.754227	36.73	1.245773	9.999301	00.13	45
16	8.755747		8.756453		1.243547	9.999294		44
17	8.757955		8.758668		1.241332	9.999287		43
18	8.760151	35.71	8.760872	35.83	1.239128	9.999279	00.13	42
19	8.762337		8.763065		1.236935	9.999272		41
20	8.764511		8.765246		1.234754	9.999265		40
21	8.766675	35.71	8.767417	35.83	1.232583	9.999257	00.13	39
22	8.768828		8.769578		1.230422	9.999250		38
23	8.770970		8.771727		1.228273	9.999242		37
24	8.773101	34.84	8.773866	34.97	1.226134	9.999235	00.13	36
25	8.775223		8.775995		1.224005	9.999227		35
26	8.777333		8.778114		1.221886	9.999220		34
27	8.779434	34.84	8.780222	34.97	1.219778	9.999212	00.13	33
28	8.781524		8.782320		1.217680	9.999205		32
29	8.783605		8.784408		1.215592	9.999197		31
30	8.785675	34.02	8.786486	34.15	1.213514	9.999189	00.14	30
31	8.787736		8.788554		1.211446	9.999181		29
32	8.789787		8.790613		1.209387	9.999174		28
33	8.791828	33.24	8.792662	33.34	1.207338	9.999166	00.14	27
34	8.793859		8.794701		1.205299	9.999158		26
35	8.795881		8.796731		1.203269	9.999150		25
36	8.797894	32.49	8.798752	32.62	1.201248	9.999142	00.14	24
37	8.799897		8.800763		1.199237	9.999134		23
38	8.801892		8.802765		1.197235	9.999126		22
39	8.803876	32.49	8.804758	32.62	1.195242	9.999118	00.14	21
40	8.805852		8.806742		1.193258	9.999110		20
41	8.807819		8.808717		1.191283	9.999102		19
42	8.809777	31.77	8.810683	31.91	1.189317	9.999094	00.14	18
43	8.811726		8.812641		1.187359	9.999086		17
44	8.813667		8.814589		1.185411	9.999077		16
45	8.815599	31.09	8.816529	31.23	1.183471	9.999069	00.14	15
46	8.817522		8.818461		1.181539	9.999061		14
47	8.819436		8.820384		1.179616	9.999053		13
48	8.821343	30.43	8.822298	30.58	1.177702	9.999044	00.14	12
49	8.823240		8.824205		1.175795	9.999036		11
50	8.825130		8.826103		1.173897	9.999027		10
51	8.827011	30.63	8.827992	30.78	1.172008	9.999019	00.14	9
52	8.828884		8.829874		1.170126	9.999010		8
53	8.830749		8.831748		1.168252	9.999002		7
54	8.832607	30.43	8.833613	30.58	1.166387	9.998993	00.14	6
55	8.834456		8.835471		1.164529	9.998984		5
56	8.836297		8.837321		1.162679	9.998976		4
57	8.838130	30.43	8.839163	30.58	1.160837	9.998967	00.14	3
58	8.839956		8.840998		1.159002	9.998958		2
59	8.841774		8.842825		1.157175	9.998950		1
60	8.843585		8.844644		1.155356	9.998941		0
	Cosin. 86		Cotang. 86		Tang. 86	Sin. 86		1

1	Sin. 4	1°	Tang. 4	1°	Corang. 4	Coan. 4	1°
0	8.843585		8.844644		1.155350	9.998941	60
1	8.843538		8.844645		1.155345	9.998932	59
2	8.843485		8.844626		1.155174	9.998923	58
3	8.843407		8.850057		1.149943	9.998914	57
4	8.850751		8.851846		1.143154	9.998905	56
5	8.852525		8.853628		1.146372	9.998896	55
6	8.854291		8.855403		1.144997	9.998887	54
7	8.856049		8.857171		1.142829	9.998878	53
8	8.857801		8.858932		1.141068	9.998869	52
9	8.859546		8.860686		1.139314	9.998860	51
10	8.861283		8.862433		1.137567	9.998851	50
11	8.863014		8.864173		1.135827	9.998841	49
12	8.864738		8.865906		1.134094	9.998832	48
13	8.866455		8.867632		1.132368	9.998823	47
14	8.868165		8.869351		1.130649	9.998813	46
15	8.869868		8.871064		1.128936	9.998804	45
16	8.871565		8.872770		1.127230	9.998795	44
17	8.873256		8.874469		1.125531	9.998785	43
18	8.874938		8.876162		1.123838	9.998776	42
19	8.876615		8.877849		1.122151	9.998766	41
20	8.878285		8.879529		1.120471	9.998757	40
21	8.879949		8.881202		1.118798	9.998747	39
22	8.881607		8.882869		1.117131	9.998738	38
23	8.883258		8.884530		1.115470	9.998728	37
24	8.884903		8.886185		1.113815	9.998718	36
25	8.886542		8.887833		1.112167	9.998708	35
26	8.888174		8.889476		1.110524	9.998699	34
27	8.889801		8.891112		1.108888	9.998689	33
28	8.891421		8.892742		1.107258	9.998679	32
29	8.893035		8.894366		1.105634	9.998669	31
30	8.894643		8.895984		1.104016	9.998659	30
31	8.896246		8.897596		1.102404	9.998649	29
32	8.897842		8.899203		1.100797	9.998639	28
33	8.899432		8.900803		1.099197	9.998629	27
34	8.901017		8.902398		1.097602	9.998619	26
35	8.902596		8.903987		1.096013	9.998609	25
36	8.904169		8.905570		1.094430	9.998599	24
37	8.905736		8.907147		1.092853	9.998589	23
38	8.907297		8.908719		1.091281	9.998578	22
39	8.908853		8.910285		1.089715	9.998568	21
40	8.910404		8.911846		1.088154	9.998558	20
41	8.911949		8.913401		1.086599	9.998548	19
42	8.913488		8.914951		1.085049	9.998537	18
43	8.915022		8.916495		1.083505	9.998527	17
44	8.916550		8.918034		1.081966	9.998516	16
45	8.918073		8.919568		1.080432	9.998506	15
46	8.919591		8.921096		1.078904	9.998495	14
47	8.921103		8.922619		1.077381	9.998485	13
48	8.922610		8.924136		1.075864	9.998474	12
49	8.924112		8.925649		1.074351	9.998464	11
50	8.925609		8.927156		1.072844	9.998453	10
51	8.927100		8.928658		1.071342	9.998442	9
52	8.928587		8.930155		1.069845	9.998431	8
53	8.930068		8.931647		1.068353	9.998421	7
54	8.931544		8.933134		1.066866	9.998410	6
55	8.933015		8.934616		1.065384	9.998399	5
56	8.934481		8.936093		1.063907	9.998388	4
57	8.935942		8.937565		1.062435	9.998377	3
58	8.937398		8.939032		1.060968	9.998366	2
59	8.938850		8.940494		1.059506	9.998355	1
60	8.940296		8.941952		1.058048	9.998344	0
	Coan. 85		Corang. 85		Tang. 85	Sin. 85	1

1	Sin. 5	1"	Tang. 5	1"	Cotang. 5	Cosin. 5	1"	
0	8.940296		8.941952		1.058048	9.998344	00.18	60
1	8.941738	23.87	8.943404	24.05	1.056596	9.998333		59
2	8.943174		8.944852		1.055148	9.998322		58
3	8.944606		8.946295		1.053705	9.998311		57
4	8.946034		8.947734		1.052266	9.998300		56
5	8.947456		8.949168		1.050832	9.998289	00.19	55
6	8.948874	23.48	8.950597	23.66	1.049403	9.998277		54
7	8.950287		8.952021		1.047979	9.998266		53
8	8.951696		8.953441		1.046559	9.998255		52
9	8.953100		8.954856		1.045144	9.998243		51
10	8.954499		8.956267		1.043733	9.998232		50
11	8.955894	23.10	8.957674	23.29	1.042326	9.998220		49
12	8.957284		8.959075		1.040925	9.998209		48
13	8.958670		8.960473		1.039527	9.998197		47
14	8.960052		8.961866		1.038134	9.998186		46
15	8.961429		8.963255		1.036745	9.998174		45
16	8.962801	22.73	8.964639	22.93	1.035361	9.998163		44
17	8.964170		8.966019		1.033981	9.998151		43
18	8.965534		8.967394		1.032606	9.998139		42
19	8.966893		8.968766		1.031234	9.998128		41
20	8.968249		8.970133		1.029867	9.998116	00.20	40
21	8.969600	22.38	8.971496	22.58	1.028504	9.998104		39
22	8.970947		8.972855		1.027145	9.998092		38
23	8.972289		8.974209		1.025791	9.998080		37
24	8.973628		8.975560		1.024440	9.998068		36
25	8.974962		8.976906		1.023094	9.998056		35
26	8.976293	22.04	8.978248	22.24	1.021752	9.998044		34
27	8.977619		8.979586		1.020414	9.998032		33
28	8.978941		8.980921		1.019079	9.998020		32
29	8.980250		8.982251		1.017749	9.998008		31
30	8.981573		8.983577		1.016423	9.997996		30
31	8.982883	21.70	8.984899	21.91	1.015101	9.997984		29
32	8.984189		8.986217		1.013783	9.997972		28
33	8.985491		8.987532		1.012468	9.997959		27
34	8.986789		8.988842		1.011158	9.997947		26
35	8.988083		8.990149		1.009851	9.997935	00.21	25
36	8.989374	21.38	8.991451	21.58	1.008549	9.997922		24
37	8.990660		8.992750		1.007250	9.997910		23
38	8.991943		8.994045		1.005955	9.997897		22
39	8.993222		8.995337		1.004663	9.997885		21
40	8.994497		8.996624		1.003376	9.997872		20
41	8.995768	21.06	8.997908	21.26	1.002092	9.997860		19
42	8.997036		8.999188		1.000812	9.997847		18
43	8.998299		9.000465		0.999535	9.997835		17
44	8.999560		9.001738		0.998262	9.997822		16
45	9.000816		9.003007		0.996993	9.997809		15
46	9.002069	20.76	9.004272	20.97	0.995728	9.997797		14
47	9.003318		9.005534		0.994466	9.997784		13
48	9.004563		9.006792		0.993208	9.997771		12
49	9.005805		9.008047		0.991953	9.997758		11
50	9.007044		9.009298		0.990702	9.997745	00.22	10
51	9.008278	20.46	9.010546	20.68	0.989454	9.997732		9
52	9.009510		9.011790		0.988210	9.997719		8
53	9.010737		9.013031		0.986969	9.997706		7
54	9.011962		9.014268		0.985732	9.997693		6
55	9.013182		9.015502		0.984498	9.997680		5
56	9.014400	20.18	9.016732	20.39	0.983268	9.997667		4
57	9.015613		9.017959		0.982041	9.997654		3
58	9.016824		9.019183		0.980817	9.997641		2
59	9.018031		9.020403		0.979597	9.997628		1
60	9.019235		9.021620		0.978380	9.997614		0
	Cosin. 84		Cotang. 84		Tang. 84	Sin. 84		1

1	Sin. 6	1'	Tang. 6	1'	Cotang. 6	Cosin. 6	1'	
0	9.019235		9.021620		9.978380	9.997614		60
1	9.020435	19.89	9.022834	20.12	9.977166	9.997601	00.22	59
2	9.021632		9.024044		9.975956	9.997588		58
3	9.022825		9.025251		9.974749	9.997574		57
4	9.024016		9.026455		9.973545	9.997561		56
5	9.025203		9.027655		9.972345	9.997547		55
6	9.026386	19.62	9.028852	19.85	9.971148	9.997534		54
7	9.027567		9.030046		9.969954	9.997520		53
8	9.028744		9.031237		9.968763	9.997507		52
9	9.029918		9.032425		9.967575	9.997493		51
10	9.031089		9.033609		9.966391	9.997480		50
11	9.032257	19.36	9.034791	19.59	9.965209	9.997466	00.23	49
12	9.033421		9.035969		9.964031	9.997452		48
13	9.034582		9.037144		9.962856	9.997439		47
14	9.035741		9.038316		9.961684	9.997425		46
15	9.036896		9.039485		9.960515	9.997411		45
16	9.038048	19.10	9.040651	19.33	9.959349	9.997397		44
17	9.039197		9.041813		9.958187	9.997383		43
18	9.040342		9.042973		9.957027	9.997369		42
19	9.041485		9.044130		9.955870	9.997355		41
20	9.042625		9.045284		9.954716	9.997341		40
21	9.043762	18.85	9.046434	19.08	9.953566	9.997327		39
22	9.044895		9.047582		9.952418	9.997313		38
23	9.046026		9.048727		9.951273	9.997299		37
24	9.047154		9.049869		9.950131	9.997285		36
25	9.048279		9.051008		9.948992	9.997271		35
26	9.049400	18.60	9.052144	18.84	9.947856	9.997257	00.24	34
27	9.050519		9.053277		9.946723	9.997242		33
28	9.051635		9.054407		9.945593	9.997228		32
29	9.052749		9.055535		9.944465	9.997214		31
30	9.053859		9.056659		9.943341	9.997199		30
31	9.054968	18.36	9.057781	18.60	9.942219	9.997185		29
32	9.056071		9.058900		9.941100	9.997170		28
33	9.057172		9.060016		9.939984	9.997156		27
34	9.058271		9.061130		9.938870	9.997141		26
35	9.059367		9.062240		9.937760	9.997127		25
36	9.060460	18.13	9.063348	18.37	9.936652	9.997112		24
37	9.061551		9.064453		9.935547	9.997098		23
38	9.062639		9.065556		9.934444	9.997083		22
39	9.063724		9.066655		9.933345	9.997068		21
40	9.064806		9.067752		9.932248	9.997053		20
41	9.065885	17.90	9.068846	18.15	9.931154	9.997039		19
42	9.066962		9.069938		9.930062	9.997024		18
43	9.068036		9.071027		9.928973	9.997009		17
44	9.069107		9.072113		9.927887	9.996994		16
45	9.070176		9.073197		9.926803	9.996979		15
46	9.071242	17.68	9.074278	17.93	9.925722	9.996964	00.25	14
47	9.072306		9.075356		9.924644	9.996949		13
48	9.073366		9.076432		9.923568	9.996934		12
49	9.074424		9.077505		9.922495	9.996919		11
50	9.075480		9.078576		9.921424	9.996904		10
51	9.076533	17.46	9.079644	17.72	9.920356	9.996889		9
52	9.077583		9.080710		9.919290	9.996874		8
53	9.078631		9.081773		9.918227	9.996858		7
54	9.079676		9.082833		9.917167	9.996843		6
55	9.080719		9.083891		9.916109	9.996828		5
56	9.081759	17.25	9.084947	17.51	9.915053	9.996812	00.26	4
57	9.082797		9.086000		9.914000	9.996797		3
58	9.083832		9.087050		9.912950	9.996782		2
59	9.084864		9.088098		9.911902	9.996766		1
60	9.085894		9.089144		9.910856	9.996751		0
	Cosin. 83		Cotang. 83		Tang. 83	Sin. 83		1

<i>t</i>	Sin. 7	<i>t</i> ^o	Tang. 7	<i>t</i> ^o	Cotang. 7	Cosin. 7	<i>t</i> ^o
0	9.085894		9.089144		0.910856	9.996751	60
1	9.086922	17.05	9.090187	17.31	0.909813	9.996735	59
2	9.087947		9.091228		0.908772	9.996720	58
3	9.088970		9.092266		0.907734	9.996704	57
4	9.089990		9.093302		0.906698	9.996688	56
5	9.091008		9.094336		0.905664	9.996673	55
6	9.092024	16.85	9.095367	17.11	0.904633	9.996657	54
7	9.093037		9.096395		0.903605	9.996641	53
8	9.094047		9.097422		0.902578	9.996625	52
9	9.095056		9.098446		0.901554	9.996610	51
10	9.096062		9.099468		0.900532	9.996594	50
11	9.097065	16.65	9.100487	16.91	0.899513	9.996578	49
12	9.098066		9.101504		0.898496	9.996562	48
13	9.099065		9.102519		0.897481	9.996546	47
14	9.100062		9.103532		0.896468	9.996530	46
15	9.101056		9.104542		0.895458	9.996514	45
16	9.102048	16.45	9.105550	16.72	0.894450	9.996498	44
17	9.103037		9.106556		0.893444	9.996482	43
18	9.104025		9.107559		0.892441	9.996465	42
19	9.105010		9.108560		0.891440	9.996449	41
20	9.105992		9.109559		0.890441	9.996433	40
21	9.106973	16.27	9.110556	16.54	0.889444	9.996417	39
22	9.107951		9.111551		0.888449	9.996400	38
23	9.108927		9.112543		0.887457	9.996384	37
24	9.109901		9.113533		0.886467	9.996368	36
25	9.110873		9.114521		0.885479	9.996351	35
26	9.111842	16.08	9.115507	16.36	0.884493	9.996335	34
27	9.112809		9.116491		0.883509	9.996318	33
28	9.113774		9.117472		0.882528	9.996302	32
29	9.114737		9.118452		0.881548	9.996285	31
30	9.115698	15.90	9.119429	16.18	0.880571	9.996269	30
31	9.116656		9.120404		0.879596	9.996252	29
32	9.117613		9.121377		0.878623	9.996235	28
33	9.118567		9.122348		0.877652	9.996219	27
34	9.119519		9.123317		0.876683	9.996202	26
35	9.120469		9.124284		0.875716	9.996185	25
36	9.121417	15.73	9.125249	16.01	0.874751	9.996168	24
37	9.122362		9.126211		0.873789	9.996151	23
38	9.123306		9.127172		0.872828	9.996134	22
39	9.124248		9.128130		0.871870	9.996117	21
40	9.125187		9.129087		0.870913	9.996100	20
41	9.126125	15.56	9.130041	15.84	0.869959	9.996083	19
42	9.127060		9.130994		0.869006	9.996066	18
43	9.127993		9.131944		0.868056	9.996049	17
44	9.128925		9.132893		0.867107	9.996032	16
45	9.129854		9.133839		0.866161	9.996015	15
46	9.130781	15.39	9.134784	15.68	0.865216	9.995998	14
47	9.131706		9.135726		0.864274	9.995980	13
48	9.132630		9.136667		0.863333	9.995963	12
49	9.133551		9.137605		0.862395	9.995946	11
50	9.134470	15.22	9.138542	15.51	0.861458	9.995928	10
51	9.135387		9.139476		0.860524	9.995911	9
52	9.136303		9.140409		0.859591	9.995894	8
53	9.137216		9.141340		0.858660	9.995876	7
54	9.138128		9.142269		0.857731	9.995859	6
55	9.139037	15.06	9.143196	15.36	0.856804	9.995841	5
56	9.139944		9.144121		0.855879	9.995823	4
57	9.140850		9.145044		0.854956	9.995806	3
58	9.141754		9.145966		0.854034	9.995788	2
59	9.142655		9.146885		0.853115	9.995771	1
60	9.143555		9.147803		0.852197	9.995753	0
	Cosin. 82		Cotang. 82		Tang. 82	Sin. 82	<i>t</i>

1	Sin. 8	1'	Tang. 8	1'	Cotang. 8	Cosin. 8	1'
0	9.143555		9.147803		0.852197	9.995753	60
1	9.144453	13.90	9.148718	15.20	0.851282	9.995735	59
2	9.145349		9.149632		0.850368	9.995717	58
3	9.146243		9.150544		0.849456	9.995699	57
4	9.147136		9.151454		0.848546	9.995681	56
5	9.148026		9.152363		0.847637	9.995664	55
6	9.148915	13.75	9.153269	15.05	0.846731	9.995646	54
7	9.149802		9.154174		0.845826	9.995628	53
8	9.150686		9.155077		0.844923	9.995610	52
9	9.151569		9.155978		0.844022	9.995591	51
10	9.152451		9.156877		0.843123	9.995573	50
11	9.153330		9.157775		0.842225	9.995555	49
12	9.154208	14.60	9.158671	14.90	0.841329	9.995537	48
13	9.155083		9.159565		0.840435	9.995519	47
14	9.155957		9.160457		0.839543	9.995501	46
15	9.156830		9.161347		0.838653	9.995482	45
16	9.157700	14.45	9.162236	14.76	0.837764	9.995464	44
17	9.158569		9.163123		0.836877	9.995446	43
18	9.159435		9.164008		0.835992	9.995427	42
19	9.160301		9.164892		0.835108	9.995409	41
20	9.161164		9.165774		0.834226	9.995390	40
21	9.162025	14.30	9.166654	14.61	0.833346	9.995372	39
22	9.162885		9.167532		0.832468	9.995353	38
23	9.163743		9.168409		0.831591	9.995334	37
24	9.164600		9.169284		0.830716	9.995316	36
25	9.165454		9.170157		0.829843	9.995297	35
26	9.166307	14.16	9.171029	14.47	0.828971	9.995278	34
27	9.167159		9.171899		0.828101	9.995260	33
28	9.168008		9.172767		0.827233	9.995241	32
29	9.168856		9.173634		0.826366	9.995222	31
30	9.169702		9.174499		0.825501	9.995203	30
31	9.170547	14.02	9.175362	14.33	0.824638	9.995184	29
32	9.171389		9.176224		0.823776	9.995165	28
33	9.172230		9.177084		0.822916	9.995146	27
34	9.173070		9.177942		0.822058	9.995127	26
35	9.173908		9.178799		0.821201	9.995108	25
36	9.174744	13.88	9.179655	14.20	0.820345	9.995089	24
37	9.175578		9.180508		0.819492	9.995070	23
38	9.176411		9.181360		0.818640	9.995051	22
39	9.177242		9.182211		0.817789	9.995032	21
40	9.178072		9.183059		0.816941	9.995011	20
41	9.178900	13.75	9.183907	14.07	0.816093	9.994993	19
42	9.179726		9.184752		0.815248	9.994974	18
43	9.180551		9.185597		0.814403	9.994955	17
44	9.181374		9.186439		0.813561	9.994935	16
45	9.182196		9.187280		0.812720	9.994916	15
46	9.183016	13.61	9.188120	13.94	0.811880	9.994896	14
47	9.183834		9.188958		0.811042	9.994877	13
48	9.184651		9.189794		0.810206	9.994857	12
49	9.185466		9.190629		0.809371	9.994838	11
50	9.186280		9.191462		0.808538	9.994818	10
51	9.187092	13.48	9.192294	13.81	0.807706	9.994798	9
52	9.187903		9.193124		0.806876	9.994779	8
53	9.188712		9.193953		0.806047	9.994759	7
54	9.189519		9.194780		0.805220	9.994739	6
55	9.190325		9.195606		0.804394	9.994719	5
56	9.191130	13.36	9.196430	13.69	0.803570	9.994700	4
57	9.191933		9.197253		0.802747	9.994680	3
58	9.192734		9.198074		0.801926	9.994660	2
59	9.193534		9.198894		0.801106	9.994640	1
60	9.194332		9.199713		0.800287	9.994620	0
	Cosin. 81		Cotang. 81		Tang. 81	Sin. 81	1

	Sin. 9	1°	Tang. 9	1°	Cotang. 9	Cosin. 9	1°	
0	9.194332	13.23	9.199713	13.56	0.800287	9.994620	00.34	60
1	9.195129		9.200529		0.799471	9.994600		59
2	9.195925		9.201345		0.798655	9.994580		58
3	9.196719		9.202159		0.797841	9.994560		57
4	9.197511	13.11	9.202971	13.45	0.797029	9.994540		56
5	9.198302		9.203782		0.796218	9.994519		55
6	9.199091		9.204593		0.795408	9.994499		54
7	9.199879		9.205400		0.794600	9.994479		53
8	9.200666	12.09	9.206207	13.33	0.793793	9.994459		52
9	9.201451		9.207013		0.792987	9.994438		51
10	9.202234		9.207817		0.792183	9.994418		50
11	9.203017		9.208619		0.791381	9.994398		49
12	9.203797	12.87	9.209420	13.22	0.790580	9.994377		48
13	9.204577		9.210220		0.789780	9.994357		47
14	9.205354		9.211018		0.788982	9.994336		46
15	9.206131		9.211815		0.788183	9.994316		45
16	9.206906	12.75	9.212611	13.10	0.787389	9.994295		44
17	9.207679		9.213405		0.786595	9.994274		43
18	9.208452		9.214198		0.785802	9.994254		42
19	9.209222		9.214989		0.785011	9.994233		41
20	9.209992	12.64	9.215780	12.99	0.784220	9.994212	00.35	40
21	9.210760		9.216568		0.783432	9.994191		39
22	9.211526		9.217356		0.782644	9.994171		38
23	9.212291		9.218142		0.781858	9.994150		37
24	9.213055	12.53	9.218926	12.88	0.781074	9.994129		36
25	9.213818		9.219710		0.780290	9.994108		35
26	9.214579		9.220492		0.779508	9.994087		34
27	9.215338		9.221272		0.778728	9.994066		33
28	9.216097	12.42	9.222052	12.77	0.777948	9.994045	00.36	32
29	9.216854		9.222830		0.777170	9.994024		31
30	9.217609		9.223607		0.776393	9.994003		30
31	9.218363		9.224382		0.775618	9.993982		29
32	9.219116	12.31	9.225156	12.67	0.774844	9.993960		28
33	9.219868		9.225929		0.774071	9.993939		27
34	9.220618		9.226700		0.773300	9.993918		26
35	9.221367		9.227471		0.772529	9.993897		25
36	9.222115	12.20	9.228239	12.56	0.771761	9.993875	00.37	24
37	9.222861		9.229007		0.770993	9.993854		23
38	9.223606		9.229773		0.770227	9.993832		22
39	9.224349		9.230539		0.769461	9.993811		21
40	9.225092	12.10	9.231302	12.46	0.768698	9.993789		20
41	9.225833		9.232065		0.767935	9.993768		19
42	9.226573		9.232826		0.767174	9.993746		18
43	9.227311		9.233586		0.766414	9.993725		17
44	9.228048	11.99	9.234345	12.36	0.765655	9.993703		16
45	9.228784		9.235103		0.764897	9.993681		15
46	9.229518		9.235859		0.764141	9.993660		14
47	9.230252		9.236614		0.763386	9.993638		13
48	9.230984	12.09	9.237368	12.36	0.762632	9.993616		12
49	9.231715		9.238120		0.761880	9.993594		11
50	9.232444		9.238872		0.761128	9.993572		10
51	9.233172		9.239622		0.760378	9.993550		9
52	9.233899	11.99	9.240371	12.46	0.759629	9.993528	00.37	8
53	9.234625		9.241118		0.758882	9.993506		7
54	9.235349		9.241865		0.758135	9.993484		6
55	9.236073		9.242610		0.757390	9.993462		5
56	9.236795	11.89	9.243354	12.36	0.756646	9.993440		4
57	9.237515		9.244097		0.755903	9.993418		3
58	9.238235		9.244839		0.755161	9.993396		2
59	9.238953		9.245579		0.754421	9.993374		1
60	9.239670		9.246319		0.753681	9.993351		0
	Cosin. 80		Cotang. 80		Tang. 80	Sin. 80		

<i>i</i>	Sin. 10	<i>i</i> ^o	Tang. 10	<i>i</i> ^o	Cotang. 10	Cosin. 10	<i>i</i> ^o
0	9.239670	11.89	9.246319	12.26	0.753681	9.993351	60
1	9.240386		9.247057		0.752943	9.993329	59
2	9.241101		9.247794		0.752206	9.993307	58
3	9.241814		9.248530		0.751470	9.993284	57
4	9.242526	11.79	9.249264	12.17	0.750736	9.993262	56
5	9.243237		9.249998		0.750002	9.993240	55
6	9.243947		9.250730		0.749270	9.993217	54
7	9.244656		9.251461		0.748539	9.993195	53
8	9.245363	11.69	9.252191	12.07	0.747809	9.993172	52
9	9.246069		9.252920		0.747080	9.993149	51
10	9.246775		9.253648		0.746352	9.993127	50
11	9.247478		9.254374	11.98	0.745626	9.993104	49
12	9.248181	11.60	9.255100		0.744900	9.993081	48
13	9.248883		9.255824		0.744176	9.993059	47
14	9.249583		9.256547		0.743453	9.993036	46
15	9.250282	11.50	9.257269	11.88	0.742731	9.993013	45
16	9.250980		9.257990		0.742010	9.992990	44
17	9.251677		9.258710		0.741290	9.992967	43
18	9.252373		9.259429	11.80	0.740571	9.992944	42
19	9.253067	11.41	9.260146		0.739854	9.992921	41
20	9.253761		9.260863		0.739137	9.992898	40
21	9.254453		9.261578		0.738422	9.992875	39
22	9.255144	11.31	9.262292	11.71	0.737708	9.992852	38
23	9.255834		9.263005		0.736995	9.992829	37
24	9.256523		9.263717		0.736283	9.992806	36
25	9.257211		9.264428	11.62	0.735572	9.992783	35
26	9.257898	11.41	9.265138		0.734862	9.992759	34
27	9.258583		9.265847		0.734153	9.992736	33
28	9.259268		9.266555		0.733445	9.992713	32
29	9.259951	11.23	9.267261	11.53	0.732739	9.992690	31
30	9.260633		9.267967		0.732033	9.992666	30
31	9.261314		9.268671		0.731329	9.992643	29
32	9.261994		9.269375	11.45	0.730625	9.992619	28
33	9.262673	11.13	9.270077		0.729923	9.992596	27
34	9.263351		9.270779		0.729221	9.992572	26
35	9.264027		9.271479		0.728521	9.992549	25
36	9.264703	11.05	9.272178	11.36	0.727822	9.992525	24
37	9.265377		9.272876		0.727124	9.992501	23
38	9.266051		9.273573		0.726427	9.992478	22
39	9.266723		9.274269	11.45	0.725731	9.992454	21
40	9.267395	10.96	9.274964		0.725036	9.992430	20
41	9.268065		9.275658		0.724342	9.992406	19
42	9.268734		9.276351		0.723649	9.992382	18
43	9.269402		9.277043	11.28	0.722957	9.992359	17
44	9.270069	10.87	9.277734		0.722266	9.992335	16
45	9.270735		9.278424		0.721576	9.992311	15
46	9.271400		9.279113		0.720887	9.992287	14
47	9.272064	10.60	9.279801	11.36	0.720199	9.992263	13
48	9.272726		9.280488		0.719512	9.992239	12
49	9.273388		9.281174		0.718826	9.992214	11
50	9.274049		9.281858	11.28	0.718142	9.992190	10
51	9.274708	10.41	9.282542		0.717458	9.992166	9
52	9.275367		9.283225		0.716775	9.992142	8
53	9.276025		9.283907		0.716093	9.992118	7
54	9.276681	10.31	9.284588	11.28	0.715412	9.992093	6
55	9.277337		9.285268		0.714732	9.992069	5
56	9.277991		9.285947		0.714053	9.992044	4
57	9.278645		9.286624	11.28	0.713375	9.992020	3
58	9.279297	10.21	9.287301		0.712699	9.991996	2
59	9.279948		9.287977		0.712023	9.991971	1
60	9.280599		9.288652		0.711348	9.991947	0
	Cosin. 79		Cotang. 79		Tang. 79	Sin. 79	

<i>r</i>	Sin. 11	<i>i</i> ^o	Tang. 11	<i>i</i> ^o	Cotang. 11	Cosin. 11	<i>i</i> ^o
0	9.280399		9.288652		0.711348	9.991947	60
1	9.281248	10.79	9.289326	11.30	0.710674	9.991922	59
2	9.281897		9.289999		0.710001	9.991897	58
3	9.282544		9.290671		0.709329	9.991873	57
4	9.283190		9.291342		0.708658	9.991848	56
5	9.283836		9.292013		0.707987	9.991823	55
6	9.284480	10.71	9.292682	11.12	0.707318	9.991799	54
7	9.285124		9.293350		0.706650	9.991774	53
8	9.285766		9.294017		0.705983	9.991749	52
9	9.286408		9.294684		0.705316	9.991724	51
10	9.287048		9.295349		0.704651	9.991699	50
11	9.287688	10.63	9.296013	11.04	0.703987	9.991674	49
12	9.288326		9.296677		0.703323	9.991649	48
13	9.288964		9.297339		0.702661	9.991624	47
14	9.289600		9.298001		0.701999	9.991599	46
15	9.290236	10.54	9.298662	10.96	0.701338	9.991574	45
16	9.290870		9.299322		0.700678	9.991549	44
17	9.291504		9.299980		0.700020	9.991524	43
18	9.292137	10.47	9.300638	10.89	0.699362	9.991498	42
19	9.292768		9.301295		0.698705	9.991473	41
20	9.293399		9.301951		0.698049	9.991448	40
21	9.294029	10.39	9.302607	10.82	0.697395	9.991422	39
22	9.294658		9.303261		0.696739	9.991397	38
23	9.295286	10.31	9.303914	10.74	0.696086	9.991372	37
24	9.295913		9.304567		0.695433	9.991346	36
25	9.296539	10.24	9.305218	10.67	0.694782	9.991321	35
26	9.297164		9.305869		0.694131	9.991295	34
27	9.297788	10.16	9.306519	10.60	0.693481	9.991270	33
28	9.298412		9.307168		0.692832	9.991244	32
29	9.299034	10.09	9.307815	10.53	0.692184	9.991218	31
30	9.299655		9.308463		0.691537	9.991193	30
31	9.300276	10.01	9.309109	10.45	0.690891	9.991167	29
32	9.300895		9.309754		0.690246	9.991141	28
33	9.301514	9.94	9.310399	10.39	0.689601	9.991115	27
34	9.302132		9.311042		0.688958	9.991090	26
35	9.302748	10.24	9.311685	10.67	0.688315	9.991064	25
36	9.303364		9.312327		0.687673	9.991038	24
37	9.303979	10.16	9.312968	10.60	0.687032	9.991012	23
38	9.304593		9.313608		0.686392	9.990986	22
39	9.305207	10.09	9.314247	10.53	0.685753	9.990960	21
40	9.305819		9.314885		0.685115	9.990934	20
41	9.306430	10.01	9.315523	10.45	0.684477	9.990908	19
42	9.307041		9.316159		0.683841	9.990882	18
43	9.307650	9.94	9.316795	10.39	0.683205	9.990855	17
44	9.308259		9.317430		0.682570	9.990829	16
45	9.308867	10.24	9.318064	10.67	0.681936	9.990803	15
46	9.309474		9.318697		0.681303	9.990777	14
47	9.310080	10.16	9.319330	10.60	0.680670	9.990750	13
48	9.310685		9.319961		0.680039	9.990724	12
49	9.311289	10.09	9.320592	10.53	0.679408	9.990697	11
50	9.311893		9.321222		0.678778	9.990671	10
51	9.312495	10.01	9.321851	10.45	0.678149	9.990645	9
52	9.313097		9.322479		0.677521	9.990618	8
53	9.313698	9.94	9.323106	10.39	0.676894	9.990591	7
54	9.314297		9.323733		0.676267	9.990565	6
55	9.314897	10.24	9.324358	10.67	0.675642	9.990538	5
56	9.315495		9.324983		0.675017	9.990511	4
57	9.316092	10.16	9.325607	10.60	0.674393	9.990485	3
58	9.316689		9.326231		0.673769	9.990458	2
59	9.317284	10.09	9.326853	10.53	0.673147	9.990431	1
60	9.317879		9.327475		0.672525	9.990404	0
	Cosin. 78		Cotang. 78		Tang. 78	Sin. 78	<i>r</i>

	Sin. 12	1"	Tang. 12	1"	Cotang. 12	Cosin. 12	1"	
0	9.317879		9.327475		0.672525	9.990404		60
1	9.318473		9.328095	10.32	0.671905	9.990378	0.45	59
2	9.319066	9.87	9.328715		0.671285	9.990351		58
3	9.319658		9.329334	10.32	0.670666	9.990324		57
4	9.320249		9.329953		0.670047	9.990297		56
5	9.320840		9.330570		0.669430	9.990270		55
6	9.321430	9.80	9.331187	10.25	0.668813	9.990243		54
7	9.322019		9.331803		0.668197	9.990215		53
8	9.322607		9.332418	10.25	0.667582	9.990188		52
9	9.323194		9.333033		0.666967	9.990161		51
10	9.323780		9.333646		0.666354	9.990134		50
11	9.324366	9.73	9.334259	10.19	0.665741	9.990107	0.46	49
12	9.324950		9.334871		0.665129	9.990079		48
13	9.325534		9.335482		0.664518	9.990052		47
14	9.326117		9.336093		0.663907	9.990025		46
15	9.326700		9.336702		0.663298	9.989997		45
16	9.327281	9.66	9.337311	10.12	0.662689	9.989970		44
17	9.327862		9.337919		0.662081	9.989942		43
18	9.328442		9.338527		0.661473	9.989915		42
19	9.329021		9.339133		0.660867	9.989887		41
20	9.329599		9.339739	10.06	0.660261	9.989860		40
21	9.330170	9.60	9.340344		0.659656	9.989832		39
22	9.330752		9.340948		0.659052	9.989804		38
23	9.331329		9.341552		0.658448	9.989777		37
24	9.331903		9.342155		0.657845	9.989749		36
25	9.332478		9.342757		0.657243	9.989721		35
26	9.333051	9.53	9.343358	9.99	0.656642	9.989693		34
27	9.333624		9.343958		0.656042	9.989665		33
28	9.334195		9.344558		0.655442	9.989637		32
29	9.334767		9.345157		0.654843	9.989610		31
30	9.335337		9.345755		0.654245	9.989582		30
31	9.335906	9.46	9.346353	9.93	0.653647	9.989553	0.47	29
32	9.336475		9.346949		0.653051	9.989525		28
33	9.337043		9.347545		0.652455	9.989497		27
34	9.337610		9.348141		0.651859	9.989469		26
35	9.338176		9.348735		0.651265	9.989441		25
36	9.338742	6.40	9.349329	9.87	0.650671	9.989413		24
37	9.339307		9.349922		0.650078	9.989385		23
38	9.339871		9.350514		0.649486	9.989356		22
39	9.340434		9.351106		0.648894	9.989328		21
40	9.340995		9.351697		0.648303	9.989300		20
41	9.341558	9.34	9.352287	9.81	0.647713	9.989271	0.48	19
42	9.342119		9.352876		0.647124	9.989243		18
43	9.342679		9.353465		0.646535	9.989214		17
44	9.343239		9.354053		0.645947	9.989186		16
45	9.343797		9.354640		0.645360	9.989157		15
46	9.344355	9.27	9.355227	9.75	0.644773	9.989128		14
47	9.344912		9.355813		0.644187	9.989100		13
48	9.345469		9.356398		0.643602	9.989071		12
49	9.346024		9.356982		0.643018	9.989042		11
50	9.346579		9.357566		0.642434	9.989014		10
51	9.347134	9.21	9.358149	9.69	0.641851	9.988985		9
52	9.347687		9.358731		0.641269	9.988956		8
53	9.348240		9.359313		0.640687	9.988927		7
54	9.348792		9.359893		0.640107	9.988898		6
55	9.349343		9.360474		0.639526	9.988869		5
56	9.349893	9.15	9.361053	9.63	0.638947	9.988840		4
57	9.350443		9.361632		0.638368	9.988811		3
58	9.350992		9.362210		0.637790	9.988782		2
59	9.351540		9.362787		0.637213	9.988753		1
60	9.352088		9.363364		0.636636	9.988724		0
	Cosin. 77		Cotang. 77		Tang. 77	Sin. 77		1

<i>r</i>	<i>Sin. 13</i>	<i>r</i>	<i>Tang. 13</i>	<i>r</i>	<i>Cotang. 13</i>	<i>Cosin. 13</i>	<i>r</i>
0	9.352088	9.09	9.363304	9.58	0.636036	9.988724	60
1	9.352635		9.363940		0.636060	9.988695	59
2	9.353181		9.364515		0.635485	9.988666	58
3	9.353726		9.365090		0.634910	9.988636	57
4	9.354271		9.365664		0.634336	9.988607	56
5	9.354815	9.03	9.366237	9.52	0.633763	9.988578	55
6	9.355358		9.366810		0.633190	9.988548	54
7	9.355901		9.367382		0.632618	9.988519	53
8	9.356443		9.367953		0.632047	9.988489	52
9	9.356984		9.368524		0.631476	9.988460	51
10	9.357524	8.97	9.369094	9.46	0.630906	9.988430	50
11	9.358064		9.369663		0.630337	9.988401	49
12	9.358603		9.370232		0.629768	9.988371	48
13	9.359141		9.370799		0.629201	9.988342	47
14	9.359678		9.371367		0.628633	9.988312	46
15	9.360215	8.91	9.371933	9.41	0.628067	9.988282	45
16	9.360752		9.372499		0.627501	9.988252	44
17	9.361287		9.373064		0.626936	9.988223	43
18	9.361822		9.373629		0.626371	9.988193	42
19	9.362356		9.374193		0.625807	9.988163	41
20	9.362889	8.85	9.374756	9.36	0.625244	9.988133	40
21	9.363422		9.375319		0.624681	9.988103	39
22	9.363954		9.375881		0.624119	9.988073	38
23	9.364485		9.376442		0.623558	9.988043	37
24	9.365016		9.377003		0.622997	9.988013	36
25	9.365546	8.80	9.377563	9.30	0.622437	9.987983	35
26	9.366075		9.378122		0.621878	9.987953	34
27	9.366604		9.378681		0.621319	9.987922	33
28	9.367131		9.379239		0.620761	9.987892	32
29	9.367659		9.379797		0.620203	9.987862	31
30	9.368185	8.74	9.380354	9.25	0.619646	9.987832	30
31	9.368711		9.380910		0.619090	9.987801	29
32	9.369236		9.381466		0.618534	9.987771	28
33	9.369761		9.382020		0.617980	9.987740	27
34	9.370285		9.382575		0.617425	9.987710	26
35	9.370808	8.69	9.383129	9.20	0.616871	9.987679	25
36	9.371330		9.383682		0.616318	9.987649	24
37	9.371852		9.384234		0.615766	9.987618	23
38	9.372373		9.384786		0.615214	9.987588	22
39	9.372894		9.385337		0.614663	9.987557	21
40	9.373414	8.63	9.385888	9.14	0.614112	9.987526	20
41	9.373933		9.386438		0.613562	9.987496	19
42	9.374452		9.386987		0.613013	9.987465	18
43	9.374970		9.387536		0.612464	9.987434	17
44	9.375487		9.388084		0.611916	9.987403	16
45	9.376003	8.58	9.388631	9.09	0.611369	9.987372	15
46	9.376519		9.389178		0.610822	9.987341	14
47	9.377035		9.389724		0.610276	9.987310	13
48	9.377549		9.390270		0.609730	9.987279	12
49	9.378063		9.390815		0.609185	9.987248	11
50	9.378577	8.52	9.391360	9.04	0.608640	9.987217	10
51	9.379089		9.391903		0.608097	9.987186	9
52	9.379601		9.392447		0.607553	9.987155	8
53	9.380113		9.392989		0.607011	9.987124	7
54	9.380624		9.393531		0.606469	9.987092	6
55	9.381134	8.47	9.394073	8.99	0.605927	9.987061	5
56	9.381643		9.394614		0.605386	9.987030	4
57	9.382152		9.395154		0.604846	9.986998	3
58	9.382661		9.395694		0.604306	9.986967	2
59	9.383168		9.396233		0.603767	9.986936	1
60	9.383675		9.396771		0.603229	9.986904	0
	<i>Cosin. 76</i>		<i>Cotang. 76</i>		<i>Tang. 76</i>	<i>Sin. 76</i>	<i>r</i>

Sin. 14	Tang. 14	Cotang. 14	Cosin 14	I°
0 9.383675	9.396771	0.603229	9.986904	60
1 9.384182	9.397309	0.602691	9.986873	59
2 9.384687	9.397846	0.602154	9.986841	58
3 9.385192	9.398383	0.601617	9.986809	57
4 9.385697	9.398919	0.601081	9.986776	56
5 9.386201	9.399455	0.600545	9.986746	55
6 9.386704	9.399990	0.600010	9.986714	54
7 9.387207	9.400524	0.599476	9.986683	53
8 9.387709	9.401058	0.598942	9.986651	52
9 9.388210	9.401591	0.598409	9.986619	51
10 9.388711	9.402124	0.597876	9.986587	50
11 9.389211	9.402656	0.597344	9.986555	49
12 9.389711	9.403187	0.596813	9.986523	48
13 9.390210	9.403718	0.596282	9.986491	47
14 9.390708	9.404249	0.595751	9.986459	46
15 9.391203	9.404778	0.595222	9.986427	45
16 9.391703	9.405308	0.594692	9.986395	44
17 9.392199	9.405836	0.594164	9.986363	43
18 9.392693	9.406364	0.593636	9.986331	42
19 9.393191	9.406892	0.593108	9.986299	41
20 9.393685	9.407419	0.592581	9.986266	40
21 9.394179	9.407945	0.592055	9.986234	39
22 9.394673	9.408471	0.591529	9.986202	38
23 9.395166	9.408996	0.591004	9.986169	37
24 9.395658	9.409521	0.590479	9.986137	36
25 9.396150	9.410045	0.589955	9.986104	35
26 9.396641	9.410569	0.589431	9.986072	34
27 9.397132	9.411092	0.588908	9.986039	33
28 9.397621	9.411615	0.588385	9.986007	32
29 9.398111	9.412137	0.587863	9.985974	31
30 9.398600	9.412658	0.587342	9.985942	30
31 9.399088	9.413179	0.586821	9.985909	29
32 9.399575	9.413699	0.586301	9.985876	28
33 9.400062	9.414219	0.585781	9.985843	27
34 9.400549	9.414738	0.585262	9.985811	26
35 9.401035	9.415257	0.584743	9.985778	25
36 9.401520	9.415775	0.584225	9.985745	24
37 9.402005	9.416293	0.583707	9.985712	23
38 9.402489	9.416810	0.583190	9.985679	22
39 9.402972	9.417326	0.582674	9.985646	21
40 9.403455	9.417842	0.582158	9.985613	20
41 9.403938	9.418358	0.581642	9.985580	19
42 9.404420	9.418873	0.581127	9.985547	18
43 9.404901	9.419387	0.580613	9.985514	17
44 9.405382	9.419901	0.580099	9.985480	16
45 9.405862	9.420415	0.579585	9.985447	15
46 9.406341	9.420927	0.579073	9.985414	14
47 9.406820	9.421440	0.578560	9.985381	13
48 9.407299	9.421952	0.578048	9.985347	12
49 9.407777	9.422463	0.577537	9.985314	11
50 9.408254	9.422974	0.577026	9.985280	10
51 9.408731	9.423484	0.576516	9.985247	9
52 9.409207	9.423993	0.576007	9.985213	8
53 9.409682	9.424503	0.575497	9.985180	7
54 9.410157	9.425011	0.574989	9.985146	6
55 9.410632	9.425519	0.574481	9.985113	5
56 9.411106	9.426027	0.573973	9.985079	4
57 9.411579	9.426534	0.573466	9.985045	3
58 9.412052	9.427041	0.572959	9.985011	2
59 9.412524	9.427547	0.572453	9.984978	1
60 9.412996	9.428052	0.571948	9.984944	0
Cosin. 75	Cotang. 75	Tang. 75	Sin. 75	I°

<i>i</i>	Sin. 1°	1°	Tang. 15	1°	Cotang. 15	Cosin. 15	1°
0	9.412996		9.428052		0.571948	9.984944	60
1	9.413467		9.428558		0.571442	9.984910	59
2	9.413938		9.429062		0.570938	9.984876	58
3	9.414408		9.429566		0.570434	9.984842	57
4	9.414878		9.430070		0.569930	9.984808	56
5	9.415347		9.430573		0.569427	9.984774	55
6	9.415815		9.431075		0.568925	9.984740	54
7	9.416283		9.431577		0.568423	9.984706	53
8	9.416751		9.432079		0.567921	9.984672	52
9	9.417217		9.432580		0.567420	9.984638	51
10	9.417684		9.433080		0.566920	9.984603	50
11	9.418150		9.433580		0.566420	9.984569	49
12	9.418615		9.434080		0.565920	9.984535	48
13	9.419079		9.434579		0.565421	9.984500	47
14	9.419544		9.435078		0.564922	9.984466	46
15	9.420007		9.435576		0.564424	9.984432	45
16	9.420470		9.436073		0.563927	9.984397	44
17	9.420933		9.436570		0.563430	9.984363	43
18	9.421395		9.437067		0.562933	9.984328	42
19	9.421857		9.437563		0.562437	9.984294	41
20	9.422318		9.438059		0.561941	9.984259	40
21	9.422778		9.438554		0.561446	9.984224	39
22	9.423238		9.439048		0.560952	9.984190	38
23	9.423697		9.439543		0.560457	9.984155	37
24	9.424156		9.440036		0.559964	9.984120	36
25	9.424615		9.440529		0.559471	9.984085	35
26	9.425073		9.441022		0.558978	9.984050	34
27	9.425530		9.441514		0.558486	9.984015	33
28	9.425987		9.442006		0.557994	9.983981	32
29	9.426443		9.442497		0.557503	9.983946	31
30	9.426899		9.442988		0.557012	9.983911	30
31	9.427354		9.443479		0.556521	9.983875	29
32	9.427809		9.443968		0.556032	9.983840	28
33	9.428263		9.444458		0.555542	9.983805	27
34	9.428717		9.444947		0.555053	9.983770	26
35	9.429170		9.445435		0.554565	9.983735	25
36	9.429623		9.445923		0.554077	9.983700	24
37	9.430075		9.446411		0.553589	9.983664	23
38	9.430527		9.446898		0.553102	9.983629	22
39	9.430978		9.447384		0.552616	9.983594	21
40	9.431429		9.447870		0.552130	9.983558	20
41	9.431879		9.448356		0.551644	9.983523	19
42	9.432329		9.448841		0.551159	9.983487	18
43	9.432778		9.449326		0.550674	9.983452	17
44	9.433226		9.449810		0.550190	9.983416	16
45	9.433675		9.450294		0.549706	9.983381	15
46	9.434122		9.450777		0.549223	9.983345	14
47	9.434569		9.451260		0.548740	9.983309	13
48	9.435016		9.451743		0.548257	9.983273	12
49	9.435462		9.452225		0.547775	9.983238	11
50	9.435908		9.452706		0.547294	9.983202	10
51	9.436353		9.453187		0.546813	9.983166	9
52	9.436798		9.453668		0.546332	9.983130	8
53	9.437242		9.454148		0.545852	9.983094	7
54	9.437686		9.454628		0.545372	9.983058	6
55	9.438129		9.455107		0.544893	9.983022	5
56	9.438572		9.455586		0.544414	9.982986	4
57	9.439014		9.456064		0.543936	9.982950	3
58	9.439456		9.456542		0.543458	9.982914	2
59	9.439897		9.457019		0.542981	9.982878	1
60	9.440338		9.457496		0.542504	9.982842	0
	Cosin. 74		Cotang. 74		Tang. 74	Sin. 74	1

<i>l</i>	Sin. 16	<i>l</i> ^o	Tang. 16	<i>l</i> ^o	Cotang. 16	Cosin. 16	<i>l</i> ^o	
0	9.440338		9.457496		0.542504	9.982842	0.01	60
1	9.440778	7.32	9.457973	7.93	0.542027	9.982803		59
2	9.441218		9.458449		0.541551	9.982769		58
3	9.441658		9.458925		0.541075	9.982733		57
4	9.442096		9.459400		0.540600	9.982696		56
5	9.442535		9.459875		0.540125	9.982660		55
6	9.442973	7.28	9.460349	7.69	0.539651	9.982624		54
7	9.443410		9.460823		0.539177	9.982587		53
8	9.443847		9.461297		0.538703	9.982551		52
9	9.444284		9.461770		0.538230	9.982514		51
10	9.444720		9.462242		0.537758	9.982477		50
11	9.445155	7.23	9.462715	7.85	0.537285	9.982441		49
12	9.445590		9.463186		0.536814	9.982404		48
13	9.446023		9.463658		0.536342	9.982367		47
14	9.446459		9.464128		0.535872	9.982331		46
15	9.446893		9.464599		0.535401	9.982294		45
16	9.447326	7.20	9.465069	7.82	0.534931	9.982257	0.62	44
17	9.447759		9.465539		0.534461	9.982220		43
18	9.448191		9.466008		0.533992	9.982183		42
19	9.448623		9.466477		0.533523	9.982146		41
20	9.449054		9.466945		0.533055	9.982109		40
21	9.449485	7.17	9.467413	7.78	0.532587	9.982072		39
22	9.449915		9.467880		0.532120	9.982035		38
23	9.450345		9.468347		0.531653	9.981998		37
24	9.450775		9.468814		0.531186	9.981961		36
25	9.451204		9.469280		0.530720	9.981924		35
26	9.451632	7.13	9.469746	7.75	0.530254	9.981886		34
27	9.452060		9.470211		0.529789	9.981849		33
28	9.452488		9.470676		0.529324	9.981812		32
29	9.452915		9.471141		0.528859	9.981774		31
30	9.453342		9.471605		0.528393	9.981737		30
31	9.453768	7.09	9.472069	7.71	0.527931	9.981700	0.63	29
32	9.454194		9.472532		0.527468	9.981662		28
33	9.454619		9.472995		0.527003	9.981625		27
34	9.455044		9.473457		0.526543	9.981587		26
35	9.455469		9.473919		0.526081	9.981549		25
36	9.455893	7.05	9.474381	7.68	0.525619	9.981512		24
37	9.456316		9.474842		0.525155	9.981474		23
38	9.456739		9.475303		0.524697	9.981436		22
39	9.457162		9.475763		0.524237	9.981399		21
40	9.457584		9.476223		0.523777	9.981361		20
41	9.458006	7.01	9.476683	7.65	0.523317	9.981323		19
42	9.458427		9.477142		0.522858	9.981285		18
43	9.458848		9.477601		0.522399	9.981247		17
44	9.459268		9.478059		0.521941	9.981209		16
45	9.459688		9.478517		0.521483	9.981171		15
46	9.460108	6.98	9.478975	7.61	0.521025	9.981133		14
47	9.460527		9.479432		0.520568	9.981095		13
48	9.460946		9.479889		0.520111	9.981057		12
49	9.461364		9.480345		0.519655	9.981019		11
50	9.461782		9.480801		0.519199	9.980981		10
51	9.462199	6.94	9.481257	7.58	0.518743	9.980942	0.64	9
52	9.462616		9.481712		0.518288	9.980904		8
53	9.463032		9.482167		0.517833	9.980866		7
54	9.463448		9.482621		0.517379	9.980827		6
55	9.463864		9.483075		0.516925	9.980789		5
56	9.464279	6.90	9.483529	7.55	0.516471	9.980750		4
57	9.464694		9.483982		0.516018	9.980712		3
58	9.465108		9.484435		0.515565	9.980673		2
59	9.465522		9.484887		0.515113	9.980635		1
60	9.465935		9.485339		0.514661	9.980596		0
	Cosin. 73		Cotang. 73		Tang. 73	Sin. 73		<i>l</i>

Sin. 17	1°	Tang. 17	1°	Cotang. 17	Cosin. 17	1°	
0 9.465933		9.485339		0.514661	9.980596		60
1 9.466348	6.87	9.485791	7.51	0.514209	9.980558	0.64	59
2 9.466761		9.486242		0.513758	9.980519		58
3 9.467173		9.486693		0.513307	9.980480		57
4 9.467585		9.487143		0.512857	9.980442		56
5 9.467996		9.487593		0.512407	9.980403		55
6 9.468407	6.83	9.488043	7.48	0.511957	9.980364	0.65	54
7 9.468817		9.488492		0.511508	9.980325		53
8 9.469227		9.488941		0.511059	9.980286		52
9 9.469637		9.489390		0.510610	9.980247		51
10 9.470046		9.489838		0.510162	9.980208		50
11 9.470455	6.80	9.490286	7.43	0.509714	9.980169	0.66	49
12 9.470863		9.490733		0.509267	9.980130		48
13 9.471271		9.491180		0.508820	9.980091		47
14 9.471679		9.491627		0.508373	9.980052		46
15 9.472086		9.492073		0.507927	9.980012		45
16 9.472492	6.76	9.492519	7.42	0.507481	9.979973	0.67	44
17 9.472898		9.492965		0.507035	9.979934		43
18 9.473304		9.493410		0.506590	9.979895		42
19 9.473710		9.493854		0.506146	9.979855		41
20 9.474115		9.494299		0.505701	9.979816		40
21 9.474519	6.73	9.494743	7.39	0.505257	9.979776	0.68	39
22 9.474923		9.495186		0.504814	9.979737		38
23 9.475327		9.495630		0.504370	9.979697		37
24 9.475730		9.496073		0.503927	9.979658		36
25 9.476133		9.496515		0.503485	9.979618		35
26 9.476536	6.70	9.496957	7.36	0.503043	9.979579	0.69	34
27 9.476938		9.497399		0.502601	9.979539		33
28 9.477340		9.497841		0.502159	9.979499		32
29 9.477741		9.498282		0.501718	9.979459		31
30 9.478142		9.498722		0.501278	9.979420		30
31 9.478542	6.66	9.499163	7.33	0.500837	9.979380	0.70	29
32 9.478942		9.499603		0.500397	9.979340		28
33 9.479342		9.500042		0.499958	9.979300		27
34 9.479741		9.500481		0.499519	9.979260		26
35 9.480140		9.500920		0.499080	9.979220		25
36 9.480539	6.63	9.501359	7.30	0.498641	9.979180	0.71	24
37 9.480937		9.501797		0.498203	9.979140		23
38 9.481334		9.502235		0.497765	9.979100		22
39 9.481731		9.502672		0.497328	9.979059		21
40 9.482128		9.503109		0.496891	9.979019		20
41 9.482525	6.60	9.503546	7.27	0.496454	9.978979	0.72	19
42 9.482921		9.503982		0.496018	9.978939		18
43 9.483316		9.504418		0.495582	9.978898		17
44 9.483712		9.504854		0.495146	9.978858		16
45 9.484107		9.505289		0.494711	9.978817		15
46 9.484501	6.56	9.505724	7.24	0.494276	9.978777	0.73	14
47 9.484895		9.506159		0.493841	9.978737		13
48 9.485289		9.506593		0.493407	9.978696		12
49 9.485682		9.507027		0.492973	9.978655		11
50 9.486075		9.507460		0.492540	9.978615		10
51 9.486467	6.53	9.507893	7.21	0.492107	9.978574	0.74	9
52 9.486860		9.508326		0.491674	9.978533		8
53 9.487251		9.508759		0.491241	9.978493		7
54 9.487643		9.509191		0.490809	9.978452		6
55 9.488034		9.509622		0.490378	9.978411		5
56 9.488424	6.49	9.510054	7.18	0.489946	9.978370	0.75	4
57 9.488814		9.510485		0.489515	9.978329		3
58 9.489204		9.510916		0.489084	9.978288		2
59 9.489593		9.511346		0.488654	9.978247		1
60 9.489982		9.511776		0.488224	9.978206		0
Cosin. 72		Cotan. 72		Tang. 72	Sin. 72		1.

<i>i</i>	Sin. 18	<i>i</i> ^o	Tang. 18	<i>i</i> ^o	Cotang. 18	Cosia. 18	<i>i</i> ^o
0	9.489982		9.511776		0.488224	9.978206	60
1	9.490371	6.46	9.512206	7.15	0.487794	9.978165	59
2	9.490759		9.512635		0.487365	9.978124	58
3	9.491147		9.513064		0.486936	9.978083	57
4	9.491535		9.513493		0.486507	9.978042	56
5	9.491922		9.513921		0.486079	9.978001	55
6	9.492308	6.43	9.514349	7.12	0.485651	9.977959	54
7	9.492693		9.514777		0.485223	9.977918	53
8	9.493081		9.515204		0.484796	9.977877	52
9	9.493466		9.515631		0.484369	9.977835	51
10	9.493851		9.516057		0.483943	9.977794	50
11	9.494236	6.40	9.516484	7.10	0.483516	9.977752	49
12	9.494621		9.516910		0.483090	9.977711	48
13	9.495005		9.517335		0.482665	9.977669	47
14	9.495388		9.517761		0.482239	9.977628	46
15	9.495772		9.518186		0.481814	9.977586	45
16	9.496154	6.37	9.518610	7.08	0.481390	9.977544	44
17	9.496537		9.519034		0.480966	9.977503	43
18	9.496919		9.519458		0.480542	9.977461	42
19	9.497301	6.34	9.519882	7.04	0.480118	9.977419	41
20	9.497682		9.520305		0.479695	9.977377	40
21	9.498064		9.520728		0.479272	9.977335	39
22	9.498444	6.31	9.521151	7.01	0.478849	9.977293	38
23	9.498825		9.521573		0.478427	9.977251	37
24	9.499204		9.521995		0.478005	9.977209	36
25	9.499584		9.522417		0.477583	9.977167	35
26	9.499963	6.28	9.522838	6.98	0.477162	9.977125	34
27	9.500342		9.523259		0.476741	9.977083	33
28	9.500721		9.523680		0.476320	9.977041	32
29	9.501099	6.25	9.524100	6.96	0.475900	9.976999	31
30	9.501476		9.524520		0.475480	9.976957	30
31	9.501854	6.22	9.524940	6.93	0.475060	9.976914	29
32	9.502231		9.525359		0.474641	9.976872	28
33	9.502608		9.525778		0.474222	9.976830	27
34	9.502984	6.19	9.526197	6.91	0.473803	9.976787	26
35	9.503360		9.526615		0.473385	9.976745	25
36	9.503735		9.527033		0.472967	9.976702	24
37	9.504110	6.16	9.527451	6.88	0.472549	9.976660	23
38	9.504485		9.527868		0.472132	9.976617	22
39	9.504860		9.528285		0.471715	9.976574	21
40	9.505234	6.13	9.528702	6.85	0.471298	9.976532	20
41	9.505608		9.529119		0.470881	9.976489	19
42	9.505981		9.529535		0.470465	9.976446	18
43	9.506354	6.10	9.529951	6.83	0.470049	9.976404	17
44	9.506727		9.530366		0.469634	9.976361	16
45	9.507099		9.530781		0.469219	9.976318	15
46	9.507471	6.07	9.531196	6.81	0.468804	9.976275	14
47	9.507843		9.531611		0.468389	9.976232	13
48	9.508214		9.532025		0.467975	9.976189	12
49	9.508585	6.04	9.532439	6.79	0.467561	9.976146	11
50	9.508956		9.532853		0.467147	9.976103	10
51	9.509326		9.533266		0.466734	9.976060	9
52	9.509696	6.01	9.533679	6.77	0.466321	9.976017	8
53	9.510065		9.534092		0.465908	9.975974	7
54	9.510434		9.534504		0.465496	9.975930	6
55	9.510803	5.98	9.534916	6.75	0.465084	9.975887	5
56	9.511172		9.535328		0.464672	9.975844	4
57	9.511540		9.535739		0.464261	9.975800	3
58	9.511907	5.95	9.536150	6.73	0.463850	9.975757	2
59	9.512275		9.536561		0.463439	9.975714	1
60	9.512642		9.536972		0.463028	9.975670	0
	Cosia. 71		Cotang. 71		Tang. 71	Sin. 71	

Sin. 19	I'	Tang. 19	I'	Cotang. 19	Cosin. 19	I'
0 9.512642		9.536972		0.463028	9.975670	60
1 9.513009	6.10	9.537382	6.83	0.462618	9.975627	59
2 9.513375		9.537792		0.462208	9.975583	58
3 9.513741		9.538202		0.461798	9.975539	57
4 9.514107		9.538611		0.461389	9.975496	56
5 9.514472		9.539020		0.460980	9.975452	55
6 9.514837	6.07	9.539429	6.80	0.460571	9.975408	54
7 9.515202		9.539837		0.460163	9.975365	53
8 9.515566		9.540245		0.459755	9.975321	52
9 9.515930		9.540653		0.459347	9.975277	51
10 9.516294		9.541061		0.458939	9.975233	50
11 9.516657	6.04	9.541468	6.78	0.458532	9.975189	49
12 9.517020		9.541875		0.458125	9.975145	48
13 9.517382		9.542281		0.457719	9.975101	47
14 9.517745		9.542688		0.457312	9.975057	46
15 9.518107		9.543094		0.456906	9.975013	45
16 9.518468	6.01	9.543499	6.75	0.456501	9.974969	44
17 9.518829		9.543905		0.456095	9.974925	43
18 9.519190		9.544310		0.455690	9.974880	42
19 9.519551		9.544715		0.455285	9.974836	41
20 9.519911		9.545119		0.454881	9.974792	40
21 9.520271	5.99	9.545524	6.73	0.454476	9.974748	39
22 9.520631		9.545928		0.454072	9.974703	38
23 9.520990		9.546331		0.453669	9.974659	37
24 9.521349		9.546735		0.453265	9.974614	36
25 9.521707		9.547138		0.452862	9.974570	35
26 9.522066	5.96	9.547540	6.70	0.452460	9.974525	34
27 9.522424		9.547943		0.452057	9.974481	33
28 9.522781		9.548345		0.451655	9.974436	32
29 9.523138		9.548747		0.451253	9.974391	31
30 9.523495		9.549149		0.450851	9.974347	30
31 9.523852	5.93	9.549550	6.68	0.450450	9.974302	29
32 9.524208		9.549951		0.450049	9.974257	28
33 9.524564		9.550352		0.449648	9.974212	27
34 9.524920		9.550752		0.449248	9.974167	26
35 9.525275		9.551153		0.448847	9.974122	25
36 9.525630	5.90	9.551552	6.65	0.448448	9.974077	24
37 9.525984		9.551952		0.448048	9.974032	23
38 9.526339		9.552351		0.447649	9.973987	22
39 9.526693		9.552750		0.447250	9.973942	21
40 9.527046		9.553149		0.446851	9.973897	20
41 9.527400		9.553548		0.446452	9.973852	19
42 9.527753	5.88	9.553946	6.63	0.446054	9.973807	18
43 9.528105		9.554344		0.445656	9.973761	17
44 9.528458		9.554741		0.445259	9.973716	16
45 9.528810		9.555139		0.444861	9.973671	15
46 9.529161		9.555536		0.444464	9.973625	14
47 9.529513	5.85	9.555933	6.61	0.444067	9.973580	13
48 9.529864		9.556329		0.443671	9.973535	12
49 9.530215		9.556725		0.443275	9.973489	11
50 9.530565		9.557121		0.442879	9.973444	10
51 9.530915	5.82	9.557517	6.59	0.442483	9.973398	9
52 9.531265		9.557913		0.442087	9.973352	8
53 9.531614		9.558308		0.441692	9.973307	7
54 9.531963		9.558703		0.441297	9.973261	6
55 9.532312		9.559097		0.440903	9.973215	5
56 9.532661	5.80	9.559491	6.56	0.440509	9.973169	4
57 9.533009		9.559885		0.440115	9.973123	3
58 9.533357		9.560279		0.439721	9.973078	2
59 9.533704		9.560673		0.439327	9.973032	1
60 9.534052		9.561066		0.438934	9.972986	0
Cosin. 70		Cotang. 70		Tang. 70	Sin. 70	1

P	Sin. 20	P	Tang. 20	P	Cotang. 20	P	Cosin. 20	P
0	9.534032		9.561066		0.438034		9.972986	60
1	9.534399	5.77	9.561459	0.54	0.438541	0.77	9.972940	59
2	9.534743		9.561851		0.438149		9.972894	58
3	9.535092		9.562244		0.437756		9.972848	57
4	9.535438		9.562636		0.437364		9.972802	56
5	9.535783		9.563028		0.436972		9.972755	55
6	9.536129	5.75	9.563419	0.52	0.436581	0.75	9.972709	54
7	9.536474		9.563811		0.436189		9.972663	53
8	9.536818		9.564202		0.435798		9.972617	52
9	9.537163		9.564593		0.435407		9.972570	51
10	9.537507		9.564983		0.435017		9.972524	50
11	9.537851	5.72	9.565373	0.50	0.434627	0.72	9.972478	49
12	9.538194		9.565763		0.434237		9.972431	48
13	9.538538		9.566153		0.433847		9.972385	47
14	9.538880		9.566542		0.433458		9.972338	46
15	9.539223		9.566932		0.433068		9.972291	45
16	9.539565	5.69	9.567320	0.47	0.432680	0.69	9.972245	44
17	9.539907		9.567709		0.432291		9.972198	43
18	9.540249		9.568098		0.431902		9.972151	42
19	9.540590		9.568486		0.431514		9.972105	41
20	9.540931		9.568873		0.431127		9.972058	40
21	9.541272	5.67	9.569261	0.45	0.430739	0.67	9.972011	39
22	9.541613		9.569648		0.430352		9.971964	38
23	9.541953		9.570035		0.429965		9.971917	37
24	9.542293		9.570422		0.429578		9.971870	36
25	9.542632		9.570809		0.429191		9.971823	35
26	9.542971	5.64	9.571195	0.43	0.428805	0.64	9.971776	34
27	9.543310		9.571581		0.428419		9.971729	33
28	9.543649		9.571967		0.428033		9.971682	32
29	9.543987		9.572352		0.427648		9.971635	31
30	9.544325		9.572738		0.427262		9.971588	30
31	9.544663	5.62	9.573123	0.41	0.426877	0.62	9.971540	29
32	9.545000		9.573507		0.426493		9.971493	28
33	9.545338		9.573892		0.426108		9.971446	27
34	9.545674		9.574276		0.425724		9.971398	26
35	9.546011		9.574660		0.425340		9.971351	25
36	9.546347	5.59	9.575044	0.39	0.424956	0.59	9.971303	24
37	9.546683		9.575427		0.424573		9.971256	23
38	9.547019		9.575810		0.424190		9.971208	22
39	9.547354		9.576193		0.423807		9.971161	21
40	9.547689		9.576576		0.423424		9.971113	20
41	9.548024	5.57	9.576959	0.36	0.423041	0.57	9.971066	19
42	9.548359		9.577341		0.422659		9.971018	18
43	9.548693		9.577723		0.422277		9.970970	17
44	9.549027		9.578104		0.421896		9.970922	16
45	9.549360		9.578486		0.421514		9.970874	15
46	9.549693	5.54	9.578867	0.34	0.421133	0.54	9.970827	14
47	9.550026		9.579248		0.420752		9.970779	13
48	9.550359		9.579629		0.420371		9.970731	12
49	9.550692		9.580009		0.419991		9.970683	11
50	9.551024		9.580389		0.419611		9.970635	10
51	9.551356	5.52	9.580769	0.32	0.419231	0.52	9.970586	9
52	9.551687		9.581149		0.418851		9.970538	8
53	9.552018		9.581528		0.418472		9.970490	7
54	9.552349		9.581907		0.418093		9.970442	6
55	9.552680		9.582286		0.417714		9.970394	5
56	9.553010	5.50	9.582665	0.30	0.417335	0.50	9.970345	4
57	9.553341		9.583044		0.416956		9.970297	3
58	9.553670		9.583422		0.416578		9.970249	2
59	9.554000		9.583800		0.416200		9.970200	1
60	9.554329		9.584177		0.415823		9.970152	0
	Cosin. 69		Cotang. 69		Tang. 69		Sin. 69	

θ	Sin. 21	$1''$	Tang. 21	$1''$	Cotang. 21	Cosine 21	$1''$
0	9.554329		9.584177		0.415823	9.970152	60
1	9.554658		9.584535		0.415465	9.970103	59
2	9.554987		9.584893	0.28	0.415108	9.970055	58
3	9.555315		9.585250		0.414751	9.970006	57
4	9.555643		9.585606		0.414394	9.969957	56
5	9.555971		9.585962		0.414038	9.969909	55
6	9.556299	5.47	9.586319	0.26	0.413681	9.969860	54
7	9.556626		9.586675		0.413325	9.969811	53
8	9.556953	5.45	9.587030	0.24	0.412968	9.969762	52
9	9.557280		9.587386		0.412612	9.969714	51
10	9.557606		9.587741		0.412255	9.969665	50
11	9.557932	5.43	9.588096	0.22	0.411898	9.969616	49
12	9.558258		9.588451		0.411542	9.969567	48
13	9.558583		9.588806		0.411185	9.969518	47
14	9.558909	5.40	9.589160	0.20	0.410828	9.969469	46
15	9.559234		9.589514		0.410472	9.969420	45
16	9.559558	5.38	9.589868	0.19	0.410115	9.969370	44
17	9.559883		9.590222		0.409758	9.969321	43
18	9.560207	5.36	9.590576	0.17	0.409402	9.969272	42
19	9.560531		9.590930		0.409045	9.969223	41
20	9.560855	5.33	9.591284	0.16	0.408688	9.969173	40
21	9.561178		9.591638		0.408332	9.969124	39
22	9.561501	5.31	9.591992	0.15	0.407975	9.969075	38
23	9.561824		9.592346		0.407618	9.969025	37
24	9.562146	5.29	9.592700	0.13	0.407262	9.968976	36
25	9.562468		9.593054		0.406905	9.968926	35
26	9.562790	5.26	9.593408	0.11	0.406548	9.968877	34
27	9.563112		9.593762		0.406192	9.968827	33
28	9.563433	5.22	9.594116	0.09	0.405835	9.968777	32
29	9.563755		9.594470		0.405478	9.968728	31
30	9.564075	5.19	9.594824	0.07	0.405122	9.968678	30
31	9.564396		9.595178		0.404765	9.968628	29
32	9.564716	5.17	9.595532	0.05	0.404408	9.968578	28
33	9.565036		9.595886		0.404052	9.968528	27
34	9.565356	5.14	9.596240	0.03	0.403695	9.968479	26
35	9.565676		9.596594		0.403338	9.968429	25
36	9.565995	5.11	9.596948	0.01	0.402982	9.968379	24
37	9.566314		9.597302		0.402625	9.968329	23
38	9.566632	5.08	9.597656	0.00	0.402268	9.968278	22
39	9.566951		9.598010		0.401912	9.968228	21
40	9.567269	5.05	9.598364	0.00	0.401555	9.968178	20
41	9.567587		9.598718		0.401198	9.968128	19
42	9.567904	5.02	9.599072	0.00	0.400842	9.968078	18
43	9.568222		9.599426		0.400485	9.968027	17
44	9.568539	5.00	9.599780	0.00	0.400128	9.967977	16
45	9.568856		9.600134		0.399772	9.967927	15
46	9.569172	4.97	9.600488	0.00	0.399415	9.967876	14
47	9.569488		9.600842		0.399058	9.967826	13
48	9.569804	4.94	9.601196	0.00	0.398702	9.967775	12
49	9.570120		9.601550		0.398345	9.967725	11
50	9.570435	4.91	9.601904	0.00	0.397988	9.967674	10
51	9.570751		9.602258		0.397632	9.967624	9
52	9.571066	4.88	9.602612	0.00	0.397275	9.967573	8
53	9.571380		9.602966		0.396918	9.967522	7
54	9.571695	4.85	9.603320	0.00	0.396562	9.967471	6
55	9.572009		9.603674		0.396205	9.967421	5
56	9.572323	4.82	9.604028	0.00	0.395848	9.967370	4
57	9.572636		9.604382		0.395492	9.967319	3
58	9.572950	4.79	9.604736	0.00	0.395135	9.967268	2
59	9.573263		9.605090		0.394778	9.967217	1
60	9.573575	4.76	9.605444	0.00	0.394422	9.967166	0
	Cosine. 68		Tang. 68		Cotang. 68	Sin. 68	1

<i>r</i>	Sin. 22	<i>r</i>	Tang. 22	<i>r</i>	Tang. 22	Col. 22	<i>r</i>
0	9.572575		9.606410		0.393590	9.967166	60
1	9.573888		9.606773	6.05	0.393227	9.967115	59
2	9.574200	5.20	9.607137		0.392863	9.967064	58
3	9.574512		9.607500		0.392500	9.967013	57
4	9.574824		9.607863		0.392137	9.966961	56
5	9.575136		9.608225		0.391775	9.966910	55
6	9.575447		9.608588	6.04	0.391412	9.966859	54
7	9.575758	5.18	9.608950		0.391050	9.966808	53
8	9.576069		9.609312		0.390688	9.966756	52
9	9.576379		9.609674		0.390326	9.966705	51
10	9.576689		9.610036		0.389964	9.966653	50
11	9.576999	5.16	9.610397	6.02	0.389603	9.966602	49
12	9.577309		9.610759		0.389241	9.966550	48
13	9.577618		9.611120		0.388880	9.966499	47
14	9.577927		9.611480		0.388520	9.966447	46
15	9.578236		9.611841		0.388159	9.966395	45
16	9.578545	5.14	9.612201	6.00	0.387799	9.966344	44
17	9.578853		9.612561		0.387439	9.966292	43
18	9.579162		9.612921		0.387079	9.966240	42
19	9.579470		9.613281		0.386719	9.966188	41
20	9.579777		9.613641		0.386359	9.966136	40
21	9.580085	5.12	9.614000	5.08	0.386000	9.966085	39
22	9.580392		9.614359		0.385641	9.966033	38
23	9.580699		9.614718		0.385282	9.965981	37
24	9.581005		9.615077		0.384923	9.965929	36
25	9.581312		9.615435		0.384565	9.965876	35
26	9.581618	5.09	9.615793	5.06	0.384207	9.965824	34
27	9.581924		9.616151		0.383849	9.965772	33
28	9.582229		9.616509		0.383491	9.965720	32
29	9.582535		9.616867		0.383133	9.965668	31
30	9.582840		9.617224		0.382776	9.965615	30
31	9.583145	5.07	9.617582	5.05	0.382418	9.965563	29
32	9.583449		9.617939		0.382061	9.965511	28
33	9.583754		9.618295		0.381705	9.965458	27
34	9.584058		9.618652		0.381348	9.965406	26
35	9.584361		9.619008		0.380992	9.965353	25
36	9.584665	5.05	9.619364	5.03	0.380636	9.965301	24
37	9.584969		9.619720		0.380280	9.965248	23
38	9.585272		9.620076		0.379924	9.965195	22
39	9.585574		9.620432		0.379568	9.965143	21
40	9.585877		9.620787		0.379213	9.965090	20
41	9.586179	5.03	9.621142	5.01	0.378858	9.965037	19
42	9.586482		9.621497		0.378503	9.964984	18
43	9.586783		9.621852		0.378148	9.964931	17
44	9.587085		9.622207		0.377793	9.964879	16
45	9.587386		9.622561		0.377439	9.964826	15
46	9.587688	5.01	9.622915	5.00	0.377085	9.964773	14
47	9.587989		9.623269		0.376731	9.964720	13
48	9.588289		9.623623		0.376377	9.964666	12
49	9.588590		9.623976		0.376024	9.964613	11
50	9.588890		9.624330		0.375670	9.964560	10
51	9.589190	4.99	9.624683	5.08	0.375317	9.964507	9
52	9.589489		9.625036		0.374964	9.964454	8
53	9.589789		9.625388		0.374612	9.964400	7
54	9.590088		9.625741		0.374259	9.964347	6
55	9.590387		9.626093		0.373907	9.964294	5
56	9.590686	4.97	9.626445	5.06	0.373555	9.964240	4
57	9.590984		9.626797		0.373203	9.964187	3
58	9.591282		9.627149		0.372851	9.964133	2
59	9.591580		9.627501		0.372499	9.964080	1
60	9.591878		9.627852		0.372148	9.964026	0
	Corin. 67		Colang. 67		Tang. 67	Sin. 67	

<i>r</i>	Sin. 23	<i>r</i>	Tang. 23	<i>r</i>	Cotang. 23	Cosin. 23	<i>r</i>
0	9.591878		9.627852		0.372148	9.964026	60
1	9.592176		9.628203	5.85	0.371797	9.963972	59
2	9.592473		9.628554		0.371446	9.963919	58
3	9.592770		9.628905		0.371095	9.963865	57
4	9.593067		9.629255		0.370745	9.963811	56
5	9.593363		9.629606		0.370394	9.963757	55
6	9.593659	4.95	9.629956		0.370044	9.963704	54
7	9.593955		9.630306	5.83	0.369694	9.963650	53
8	9.594251		9.630656		0.369344	9.963596	52
9	9.594547		9.631005		0.368995	9.963542	51
10	9.594842		9.631355		0.368645	9.963488	50
11	9.595137	4.93	9.631704		0.368296	9.963434	49
12	9.595432		9.632053	5.81	0.367947	9.963379	48
13	9.595727	4.91	9.632402		0.367598	9.963325	47
14	9.596021		9.632750		0.367249	9.963271	46
15	9.596315		9.633099		0.366901	9.963217	45
16	9.596609	4.89	9.633447		0.366553	9.963163	44
17	9.596903		9.633795	5.79	0.366205	9.963108	43
18	9.597196		9.634143		0.365857	9.963054	42
19	9.597490		9.634490		0.365510	9.962999	41
20	9.597783		9.634838		0.365162	9.962945	40
21	9.598075	4.87	9.635185		0.364815	9.962890	39
22	9.598368		9.635532	5.80	0.364468	9.962836	38
23	9.598660		9.635879		0.364121	9.962781	37
24	9.598952		9.636226		0.363774	9.962727	36
25	9.599244		9.636572		0.363428	9.962672	35
26	9.599536	4.85	9.636919		0.363081	9.962617	34
27	9.599827		9.637265	5.78	0.362735	9.962562	33
28	9.600118		9.637611		0.362389	9.962508	32
29	9.600409		9.637956		0.362044	9.962453	31
30	9.600700		9.638302		0.361698	9.962398	30
31	9.600990	4.83	9.638647		0.361353	9.962343	29
32	9.601280		9.638992	5.77	0.361008	9.962288	28
33	9.601570		9.639337		0.360663	9.962233	27
34	9.601860		9.639682		0.360318	9.962178	26
35	9.602150		9.640027		0.359973	9.962123	25
36	9.602439	4.81	9.640371		0.359629	9.962067	24
37	9.602728		9.640716	5.75	0.359284	9.962012	23
38	9.603017		9.641060		0.358940	9.961957	22
39	9.603305		9.641404		0.358596	9.961902	21
40	9.603594		9.641747		0.358253	9.961846	20
41	9.603882	4.79	9.642091		0.357909	9.961791	19
42	9.604170		9.642434	5.73	0.357566	9.961735	18
43	9.604457		9.642777		0.357223	9.961680	17
44	9.604745		9.643120		0.356880	9.961624	16
45	9.605032		9.643463		0.356537	9.961569	15
46	9.605319	4.78	9.643806		0.356194	9.961513	14
47	9.605606		9.644148	5.72	0.355852	9.961458	13
48	9.605892		9.644490		0.355510	9.961402	12
49	9.606179		9.644832		0.355168	9.961346	11
50	9.606465		9.645174		0.354826	9.961290	10
51	9.606751	4.76	9.645516		0.354484	9.961235	9
52	9.607036		9.645857	5.70	0.354143	9.961179	8
53	9.607322		9.646199		0.353801	9.961123	7
54	9.607607		9.646540		0.353460	9.961067	6
55	9.607892		9.646881		0.353119	9.961011	5
56	9.608177	4.74	9.647222		0.352778	9.960955	4
57	9.608461		9.647562	5.67	0.352438	9.960899	3
58	9.608745		9.647903		0.352097	9.960843	2
59	9.609029		9.648243		0.351757	9.960786	1
60	9.609313		9.648583		0.351417	9.960730	0
	Cosin. 66		Cotang. 66		Tang. 66	Sin. 66	<i>r</i>

I	Sin. 24	I'	Tang. 24	I'	Cotang. 24	Cosin. 24	I'
0	9.609313		9.648583		0.351417	9.960730	60
1	9.609597		9.648923	5.66	0.351077	9.960674	59
2	9.609880	4.72	9.649263		0.350737	9.960618	58
3	9.610164		9.649602	5.66	0.350398	9.960561	57
4	9.610447		9.649942		0.350058	9.960505	56
5	9.610729		9.650281	5.64	0.349719	9.960448	55
6	9.611012	4.70	9.650620		0.349380	9.960392	54
7	9.611294		9.650959	5.64	0.349041	9.960335	53
8	9.611576		9.651297		0.348703	9.960279	52
9	9.611858		9.651636	5.64	0.348364	9.960222	51
10	9.612140		9.651974		0.348026	9.960165	50
11	9.612421	4.68	9.652312	5.63	0.347688	9.960109	49
12	9.612702		9.652650		0.347350	9.960052	48
13	9.612983		9.652988	5.63	0.347012	9.959995	47
14	9.613264		9.653326		0.346674	9.959938	46
15	9.613545		9.653663	5.62	0.346337	9.959882	45
16	9.613825	4.66	9.654000		0.346000	9.959825	44
17	9.614105		9.654337	5.62	0.345663	9.959768	43
18	9.614385		9.654674		0.345326	9.959711	42
19	9.614665		9.655011	5.62	0.344989	9.959654	41
20	9.614944		9.655348		0.344652	9.959596	40
21	9.615223	4.65	9.655684	5.60	0.344316	9.959539	39
22	9.615502		9.656020		0.343980	9.959482	38
23	9.615781		9.656356	5.60	0.343644	9.959425	37
24	9.616060		9.656692		0.343308	9.959368	36
25	9.616338		9.657028	5.59	0.342972	9.959310	35
26	9.616616	4.63	9.657364		0.342636	9.959253	34
27	9.616894		9.657699	5.59	0.342301	9.959195	33
28	9.617172		9.658034		0.341966	9.959138	32
29	9.617450		9.658369	5.59	0.341631	9.959080	31
30	9.617727		9.658704		0.341296	9.959023	30
31	9.618004	4.61	9.659039	5.57	0.340961	9.958965	29
32	9.618281		9.659373		0.340627	9.958908	28
33	9.618558		9.659708	5.57	0.340292	9.958850	27
34	9.618834		9.660042		0.339958	9.958792	26
35	9.619110		9.660376	5.56	0.339624	9.958734	25
36	9.619386	4.59	9.660710		0.339290	9.958677	24
37	9.619662		9.661043	5.56	0.338957	9.958619	23
38	9.619938		9.661377		0.338623	9.958561	22
39	9.620213		9.661710	5.56	0.338290	9.958503	21
40	9.620488		9.662043		0.337957	9.958445	20
41	9.620763	4.58	9.662376	5.55	0.337624	9.958387	19
42	9.621038		9.662709		0.337291	9.958329	18
43	9.621313		9.663042	5.55	0.336958	9.958271	17
44	9.621587		9.663375		0.336625	9.958213	16
45	9.621861		9.663707	5.55	0.336293	9.958154	15
46	9.622135	4.56	9.664039		0.335961	9.958096	14
47	9.622409		9.664371	5.53	0.335629	9.958038	13
48	9.622682		9.664703		0.335297	9.957979	12
49	9.622956		9.665035	5.53	0.334965	9.957921	11
50	9.623229		9.665366		0.334633	9.957863	10
51	9.623502	4.54	9.665698	5.52	0.334302	9.957804	9
52	9.623774		9.666029		0.333971	9.957746	8
53	9.624047		9.666360	5.52	0.333640	9.957687	7
54	9.624319		9.666691		0.333309	9.957628	6
55	9.624591		9.667021	5.51	0.332979	9.957570	5
56	9.624863	4.52	9.667352		0.332648	9.957511	4
57	9.625133		9.667682		0.332318	9.957452	3
58	9.625406		9.668013	5.51	0.331987	9.957393	2
59	9.625677		9.668343		0.331657	9.957335	1
60	9.625948		9.668673		0.331327	9.957286	0
	Cosin. 65		Cotang. 65		Tang. 65	Sin. 65	I

°	Sin. 25	1"	Tang. 25	1"	Cotang. 25	Cosin. 25	1"
0	9.625948		9.668673		0.331327	9.957276	60
1	9.626219	4.51	9.669002	5.49	0.330998	9.957217	59
2	9.626490		9.669332		0.330668	9.957158	58
3	9.626760		9.669661		0.330339	9.957099	57
4	9.627030		9.669991		0.330009	9.957040	56
5	9.627300		9.670320		0.329680	9.956981	55
6	9.627570	4.49	9.670649	5.46	0.329351	9.956921	54
7	9.627840		9.670977		0.329023	9.956862	53
8	9.628109		9.671306		0.328694	9.956803	52
9	9.628378		9.671635		0.328365	9.956744	51
10	9.628647		9.671963		0.328037	9.956684	50
11	9.628916	4.47	9.672291	5.46	0.327709	9.956625	49
12	9.629185		9.672619		0.327381	9.956566	48
13	9.629453		9.672947		0.327053	9.956506	47
14	9.629721		9.673274		0.326726	9.956447	46
15	9.629989		9.673602		0.326398	9.956387	45
16	9.630257	4.46	9.673929	5.45	0.326071	9.956327	44
17	9.630524		9.674257		0.325743	9.956268	43
18	9.630792		9.674584		0.325416	9.956208	42
19	9.631059		9.674911		0.325089	9.956148	41
20	9.631326		9.675237		0.324763	9.956089	40
21	9.631593	4.44	9.675564	5.44	0.324436	9.956029	39
22	9.631859		9.675890		0.324110	9.955969	38
23	9.632125		9.676217		0.323783	9.955909	37
24	9.632392		9.676543		0.323457	9.955849	36
25	9.632658		9.676869		0.323131	9.955789	35
26	9.632923	4.42	9.677194	5.42	0.322806	9.955729	34
27	9.633189		9.677520		0.322480	9.955669	33
28	9.633454		9.677846		0.322154	9.955609	32
29	9.633719		9.678171		0.321829	9.955549	31
30	9.633984		9.678496		0.321504	9.955488	30
31	9.634249	4.41	9.678821	5.41	0.321179	9.955428	29
32	9.634514		9.679146		0.320854	9.955368	28
33	9.634778		9.679471		0.320529	9.955307	27
34	9.635042		9.679795		0.320205	9.955247	26
35	9.635306		9.680120		0.319880	9.955186	25
36	9.635570	4.39	9.680444	5.40	0.319556	9.955126	24
37	9.635834		9.680768		0.319232	9.955065	23
38	9.636097		9.681092		0.318908	9.955005	22
39	9.636360		9.681416		0.318584	9.954944	21
40	9.636623		9.681740		0.318260	9.954883	20
41	9.636886	4.37	9.682063	5.39	0.317937	9.954823	19
42	9.637148		9.682387		0.317613	9.954762	18
43	9.637411		9.682710		0.317290	9.954701	17
44	9.637673		9.683033		0.316967	9.954640	16
45	9.637935		9.683356		0.316644	9.954579	15
46	9.638197	4.36	9.683679	5.37	0.316321	9.954518	14
47	9.638458		9.684001		0.315999	9.954457	13
48	9.638720		9.684324		0.315676	9.954396	12
49	9.638981		9.684646		0.315354	9.954335	11
50	9.639242		9.684968		0.315032	9.954274	10
51	9.639503	4.34	9.685290	5.36	0.314710	9.954213	9
52	9.639764		9.685612		0.314388	9.954152	8
53	9.640024		9.685934		0.314066	9.954090	7
54	9.640284		9.686255		0.313745	9.954029	6
55	9.640544		9.686577		0.313423	9.953968	5
56	9.640804	4.33	9.686898	5.35	0.313102	9.953906	4
57	9.641064		9.687219		0.312781	9.953845	3
58	9.641324		9.687540		0.312460	9.953783	2
59	9.641583		9.687861		0.312139	9.953722	1
60	9.641842		9.688182		0.311818	9.953660	0
	Cosin. 64		Cotang. 64		Tang. 64	Sin. 64	1

1	Sin. 26	1"	Tang. 26	1"	Cotang. 26	Cosin. 26	1"
0	9.641842		9.688182		0.311818	9.953660	60
1	9.642101	4.31	9.688502	5.34	0.311498	9.953599	59
2	9.642360		9.688823		0.311177	9.953537	58
3	9.642618		9.689143		0.310857	9.953475	57
4	9.642877		9.689463		0.310537	9.953413	56
5	9.643135		9.689783		0.310217	9.953352	55
6	9.643393	4.29	9.690103	5.33	0.309897	9.953290	54
7	9.643650		9.690423		0.309577	9.953228	53
8	9.643908		9.690742		0.309258	9.953166	52
9	9.644165		9.691062		0.308938	9.953104	51
10	9.644423		9.691381		0.308619	9.953042	50
11	9.644680	4.28	9.691700	5.31	0.308300	9.952980	49
12	9.644936		9.692019		0.307981	9.952918	48
13	9.645193		9.692338		0.307662	9.952855	47
14	9.645450		9.692656		0.307344	9.952793	46
15	9.645706		9.692975		0.307025	9.952731	45
16	9.645962	4.26	9.693293	5.30	0.306707	9.952669	44
17	9.646218		9.693612		0.306388	9.952606	43
18	9.646474		9.693930		0.306070	9.952544	42
19	9.646729		9.694248		0.305752	9.952481	41
20	9.646984	4.25	9.694566	5.29	0.305434	9.952419	40
21	9.647240		9.694883		0.305117	9.952356	39
22	9.647494		9.695201		0.304799	9.952294	38
23	9.647749		9.695518		0.304482	9.952231	37
24	9.648004		9.695836		0.304164	9.952168	36
25	9.648258	4.23	9.695153	5.28	0.303847	9.952106	35
26	9.648512		9.695470		0.303530	9.952043	34
27	9.648766		9.695787		0.303213	9.951980	33
28	9.649020		9.696103		0.302897	9.951917	32
29	9.649274		9.696420		0.302580	9.951854	31
30	9.649527	4.22	9.696736	5.27	0.302264	9.951791	30
31	9.649781		9.697053		0.301947	9.951728	29
32	9.650034		9.697369		0.301631	9.951665	28
33	9.650287		9.697685		0.301315	9.951602	27
34	9.650539		9.698001		0.300999	9.951539	26
35	9.650792	4.20	9.698316	5.26	0.300684	9.951476	25
36	9.651044		9.698632		0.300368	9.951412	24
37	9.651297		9.698947		0.300053	9.951349	23
38	9.651549		9.700263		0.299737	9.951286	22
39	9.651800		9.700578		0.299422	9.951222	21
40	9.652052	4.19	9.700893	5.24	0.299107	9.951159	20
41	9.652304		9.701208		0.298792	9.951096	19
42	9.652555		9.701523		0.298477	9.951032	18
43	9.652806		9.701837		0.298163	9.950968	17
44	9.653057		9.702152		0.297848	9.950905	16
45	9.653308	4.17	9.702466	5.23	0.297534	9.950841	15
46	9.653558		9.702781		0.297219	9.950778	14
47	9.653808		9.703095		0.296905	9.950714	13
48	9.654059		9.703409		0.296591	9.950650	12
49	9.654309	4.16	9.703722	5.22	0.296278	9.950586	11
50	9.654558		9.704036		0.295964	9.950522	10
51	9.654808		9.704350		0.295650	9.950458	9
52	9.655058		9.704663		0.295337	9.950394	8
53	9.655307	4.14	9.704976	5.21	0.295024	9.950330	7
54	9.655556		9.705290		0.294710	9.950266	6
55	9.655805		9.705603		0.294397	9.950202	5
56	9.656054		9.705916		0.294084	9.950138	4
57	9.656302		9.706228		0.293772	9.950074	3
58	9.656551	4.13	9.706541	5.20	0.293459	9.950010	2
59	9.656799		9.706854		0.293146	9.949945	1
60	9.657047		9.707166		0.292834	9.949881	0
	Cosin. 63		Cotang. 63		Tang. 63	Sin. 63	

Sin. 27	1"	Tang. 27	1"	Cotang. 27	Cosin. 27	1"
0 9.657047	4.12	9.707166	5.20	0.292834	9.949881	60
1 9.657295		9.707478		0.292522	9.949816	59
2 9.657542		9.707790		0.292210	9.949752	58
3 9.657790		9.708102		0.291898	9.949688	57
4 9.658037	4.11	9.708414	5.19	0.291586	9.949623	56
5 9.658284		9.708726		0.291274	9.949558	55
6 9.658531		9.709037		0.290963	9.949494	54
7 9.658778		9.709349		0.290651	9.949429	53
8 9.659025	4.10	9.709660	5.18	0.290340	9.949364	52
9 9.659271		9.709971		0.290029	9.949300	51
10 9.659517		9.710282		0.289718	9.949235	50
11 9.659763		9.710593		0.289407	9.949170	49
12 9.660009	4.08	9.710904	5.17	0.289096	9.949105	48
13 9.660255		9.711215		0.288785	9.949040	47
14 9.660501		9.711525		0.288475	9.948975	46
15 9.660746		9.711836		0.288164	9.948910	45
16 9.660991	4.07	9.712146	5.16	0.287854	9.948845	44
17 9.661236		9.712456		0.287544	9.948780	43
18 9.661481		9.712766		0.287234	9.948715	42
19 9.661726		9.713076		0.286924	9.948650	41
20 9.661970	4.05	9.713386	5.15	0.286614	9.948584	40
21 9.662214		9.713696		0.286304	9.948519	39
22 9.662459		9.714005		0.285995	9.948454	38
23 9.662703		9.714314		0.285686	9.948388	37
24 9.662946	4.04	9.714624	5.13	0.285376	9.948323	36
25 9.663190		9.714933		0.285067	9.948257	35
26 9.663433		9.715242		0.284758	9.948192	34
27 9.663677		9.715551		0.284449	9.948126	33
28 9.663920	4.03	9.715860	5.12	0.284140	9.948060	32
29 9.664163		9.716168		0.283832	9.947995	31
30 9.664406		9.716477		0.283523	9.947929	30
31 9.664648		9.716785		0.283215	9.947863	29
32 9.664891	4.02	9.717093	5.11	0.282907	9.947797	28
33 9.665133		9.717401		0.282599	9.947731	27
34 9.665375		9.717709		0.282291	9.947665	26
35 9.665617		9.718017		0.281983	9.947600	25
36 9.665859	4.01	9.718325	5.10	0.281675	9.947533	24
37 9.666100		9.718633		0.281367	9.947467	23
38 9.666342		9.718940		0.281060	9.947401	22
39 9.666583		9.719248		0.280752	9.947335	21
40 9.666824	3.99	9.719555	5.09	0.280445	9.947269	20
41 9.667065		9.719862		0.280138	9.947203	19
42 9.667305		9.720169		0.279831	9.947136	18
43 9.667546		9.720476		0.279524	9.947070	17
44 9.667786	3.98	9.720783	5.08	0.279217	9.947004	16
45 9.668027		9.721089		0.278911	9.946937	15
46 9.668267		9.721396		0.278604	9.946871	14
47 9.668508		9.721702		0.278298	9.946804	13
48 9.668746	3.97	9.722009	5.07	0.277991	9.946738	12
49 9.668986		9.722315		0.277685	9.946671	11
50 9.669225		9.722621		0.277379	9.946604	10
51 9.669464		9.722927		0.277073	9.946538	9
52 9.669703	3.96	9.723232	5.06	0.276768	9.946471	8
53 9.669942		9.723538		0.276462	9.946404	7
54 9.670181		9.723844		0.276156	9.946337	6
55 9.670419		9.724149		0.275851	9.946270	5
56 9.670658	3.95	9.724454	5.05	0.275546	9.946203	4
57 9.670896		9.724760		0.275240	9.946136	3
58 9.671134		9.725065		0.274935	9.946069	2
59 9.671372		9.725370		0.274630	9.946002	1
60 9.671609		9.725674		0.274326	9.945935	0
Cosin. 62		Cotang. 62		Tang. 62	Sin. 62	

Sin. 28	1°	Tang. 28	1°	Cotang. 28	Cosin.	1°
0 9.671609	3.95	9.725674	5.08	0.274326	9.945935	60
1 9.671847		9.725979		0.274021	9.945868	59
2 9.672084		9.726284		0.273716	9.945800	58
3 9.672321		9.726588		0.273412	9.945733	57
4 9.672558	3.94	9.726892	5.06	0.273108	9.945666	56
5 9.672795		9.727197		0.272803	9.945598	55
6 9.673032		9.727501		0.272499	9.945531	54
7 9.673268		9.727805		0.272195	9.945464	53
8 9.673505	3.93	9.728109	5.04	0.271891	9.945396	52
9 9.673741		9.728412		0.271588	9.945328	51
10 9.673977		9.728716		0.271284	9.945261	50
11 9.674213		9.729020		0.270980	9.945193	49
12 9.674448	3.91	9.729323	5.02	0.270677	9.945125	48
13 9.674684		9.729626		0.270374	9.945058	47
14 9.674919		9.729929		0.270071	9.944990	46
15 9.675155		9.730233		0.269767	9.944922	45
16 9.675390	3.90	9.730535	5.00	0.269465	9.944854	44
17 9.675624		9.730838		0.269162	9.944786	43
18 9.675859		9.731141		0.268859	9.944718	42
19 9.676094		9.731444		0.268556	9.944650	41
20 9.676328	3.88	9.731746	5.02	0.268254	9.944582	40
21 9.676562		9.732048		0.267952	9.944514	39
22 9.676796		9.732351		0.267649	9.944446	38
23 9.677030		9.732653		0.267347	9.944377	37
24 9.677264	3.87	9.732955	5.00	0.267045	9.944309	36
25 9.677498		9.733257		0.266743	9.944241	35
26 9.677731		9.733558		0.266442	9.944172	34
27 9.677964		9.733860		0.266140	9.944104	33
28 9.678197	3.86	9.734162	5.00	0.265838	9.944036	32
29 9.678430		9.734463		0.265537	9.943967	31
30 9.678663		9.734764		0.265236	9.943899	30
31 9.678895		9.735066		0.264934	9.943830	29
32 9.679128	3.84	9.735367	5.00	0.264633	9.943761	28
33 9.679360		9.735668		0.264332	9.943693	27
34 9.679592		9.735969		0.264031	9.943624	26
35 9.679824		9.736269		0.263731	9.943555	25
36 9.680056	3.83	9.736570	4.99	0.263430	9.943486	24
37 9.680288		9.736870		0.263130	9.943417	23
38 9.680519		9.737171		0.262829	9.943348	22
39 9.680750		9.737471		0.262529	9.943279	21
40 9.680982	3.82	9.737771	4.98	0.262229	9.943210	20
41 9.681213		9.738071		0.261929	9.943141	19
42 9.681443		9.738371		0.261629	9.943072	18
43 9.681674		9.738671		0.261329	9.943003	17
44 9.681905	3.80	9.738971	4.97	0.261029	9.942934	16
45 9.682135		9.739271		0.260729	9.942864	15
46 9.682365		9.739570		0.260430	9.942795	14
47 9.682595		9.739870		0.260130	9.942726	13
48 9.682825	3.81	9.740169	4.95	0.259831	9.942656	12
49 9.683055		9.740468		0.259532	9.942587	11
50 9.683284		9.740767		0.259233	9.942517	10
51 9.683514		9.741066		0.258934	9.942448	9
52 9.683743	3.80	9.741365	4.94	0.258635	9.942378	8
53 9.683972		9.741664		0.258336	9.942308	7
54 9.684201		9.741962		0.258038	9.942239	6
55 9.684430		9.742261		0.257739	9.942169	5
56 9.684658	3.80	9.742559	4.93	0.257441	9.942099	4
57 9.684887		9.742858		0.257142	9.942029	3
58 9.685115		9.743156		0.256844	9.941959	2
59 9.685343		9.743454		0.256546	9.941889	1
60 9.685571		9.743752		0.256248	9.941819	0
Cosin. 61		Cotang. 61		Tang. 61	Sin. 61	

1	Sin. 29	1°	Tang 29	1°	Cotang. 29	Cosin. 29	1°
0	9.685571		9.743752		0.256246	9.941819	00
1	9.685799	3.79	9.744030	4.95	0.255950	9.941749	59
2	9.686027		9.744318		0.255652	9.941679	58
3	9.686254		9.744605		0.255355	9.941609	57
4	9.686482		9.744893		0.255057	9.941539	56
5	9.686709		9.745180		0.254760	9.941469	55
6	9.686936	3.78	9.745468	4.95	0.254462	9.941398	54
7	9.687163		9.745755		0.254165	9.941328	53
8	9.687389		9.746043		0.253868	9.941258	52
9	9.687616		9.746330		0.253571	9.941187	51
10	9.687843		9.746618		0.253274	9.941117	50
11	9.688069	3.76	9.746905	4.94	0.252977	9.941046	49
12	9.688295		9.747193		0.252681	9.940975	48
13	9.688521		9.747480		0.252384	9.940905	47
14	9.688747		9.747768		0.252087	9.940834	46
15	9.688972		9.748055		0.251791	9.940763	45
16	9.689198	3.75	9.748343	4.93	0.251495	9.940693	44
17	9.689423		9.748630		0.251199	9.940622	43
18	9.689648		9.748918		0.250903	9.940551	42
19	9.689873		9.749205		0.250607	9.940480	41
20	9.690098		9.749493		0.250311	9.940409	40
21	9.690323	3.74	9.749780	4.91	0.250015	9.940338	39
22	9.690548		9.750068		0.249719	9.940267	38
23	9.690772		9.750355		0.249424	9.940196	37
24	9.690996		9.750643		0.249128	9.940125	36
25	9.691220		9.750930		0.248833	9.940054	35
26	9.691444	3.73	9.751218	4.92	0.248538	9.939982	34
27	9.691668		9.751505		0.248243	9.939911	33
28	9.691892		9.751793		0.247948	9.939840	32
29	9.692115		9.752080		0.247653	9.939768	31
30	9.692339		9.752368		0.247358	9.939697	30
31	9.692562	3.71	9.752655	4.91	0.247063	9.939625	29
32	9.692785		9.752943		0.246769	9.939554	28
33	9.693008		9.753230		0.246474	9.939482	27
34	9.693231		9.753518		0.246180	9.939410	26
35	9.693453		9.753805		0.245885	9.939339	25
36	9.693676	3.70	9.754093	4.90	0.245591	9.939267	24
37	9.693898		9.754380		0.245297	9.939195	23
38	9.694120		9.754668		0.245003	9.939123	22
39	9.694342		9.754955		0.244709	9.939052	21
40	9.694564		9.755243		0.244415	9.938980	20
41	9.694786	3.69	9.755530	4.89	0.244122	9.938908	19
42	9.695007		9.755818		0.243828	9.938836	18
43	9.695229		9.756105		0.243535	9.938763	17
44	9.695450		9.756393		0.243241	9.938691	16
45	9.695671		9.756680		0.242948	9.938619	15
46	9.695892	3.68	9.756968	4.88	0.242655	9.938547	14
47	9.696113		9.757255		0.242362	9.938475	13
48	9.696334		9.757543		0.242069	9.938402	12
49	9.696554		9.757830		0.241776	9.938330	11
50	9.696775		9.758118		0.241483	9.938258	10
51	9.696995	3.66	9.758405	4.87	0.241190	9.938185	9
52	9.697215		9.758693		0.240898	9.938113	8
53	9.697435		9.758980		0.240605	9.938040	7
54	9.697654		9.759268		0.240313	9.937967	6
55	9.697874		9.759555		0.240021	9.937895	5
56	9.698094	3.65	9.759843	4.85	0.239728	9.937822	4
57	9.698313		9.760130		0.239436	9.937749	3
58	9.698532		9.760418		0.239144	9.937676	2
59	9.698751		9.760705		0.238852	9.937604	1
60	9.698970		9.761000		0.238561	9.937531	0
	Cosin. 60		Cotang. 60		Tang. 60	Sin. 60	1

1	Sin. 30	1°	Tang. 30	1°	Cotang. 30	Cosin. 30	1°
0	9.698970	3.64	9.761439	4.86	0.238561	9.937531	50
1	9.699189		9.761731		0.238269	9.937458	50
2	9.699407		9.762023		0.237977	9.937385	58
3	9.699626		9.762314		0.237686	9.937312	57
4	9.699844		9.762606		0.237394	9.937238	56
5	9.700062	3.63	9.762897	4.85	0.237103	9.937165	55
6	9.700280		9.763188		0.236812	9.937092	54
7	9.700498		9.763479		0.236521	9.937019	53
8	9.700716		9.763770		0.236230	9.936946	52
9	9.700933		9.764061		0.235939	9.936872	51
10	9.701151	3.62	9.764352	4.84	0.235648	9.936799	50
11	9.701368		9.764643		0.235357	9.936725	49
12	9.701585		9.764933		0.235067	9.936652	48
13	9.701802		9.765224		0.234776	9.936578	47
14	9.702019		9.765514		0.234486	9.936505	46
15	9.702236	3.60	9.765805	4.83	0.234195	9.936431	45
16	9.702452		9.766095		0.233905	9.936357	44
17	9.702669		9.766385		0.233615	9.936284	43
18	9.702885		9.766675		0.233325	9.936210	42
19	9.703101		9.766965		0.233035	9.936136	41
20	9.703317	3.59	9.767255	4.82	0.232745	9.936062	40
21	9.703533		9.767545		0.232455	9.935988	39
22	9.703749		9.767834		0.232166	9.935914	38
23	9.703964		9.768124		0.231876	9.935840	37
24	9.704179		9.768414		0.231586	9.935766	36
25	9.704395	3.58	9.768703	4.81	0.231297	9.935692	35
26	9.704610		9.768992		0.231008	9.935618	34
27	9.704825		9.769281		0.230719	9.935543	33
28	9.705040		9.769571		0.230429	9.935469	32
29	9.705254		9.769860		0.230140	9.935395	31
30	9.705469	3.57	9.770148	4.80	0.229852	9.935320	30
31	9.705683		9.770437		0.229563	9.935246	29
32	9.705898		9.770726		0.229274	9.935171	28
33	9.706112		9.771015		0.228985	9.935097	27
34	9.706326		9.771303		0.228697	9.935022	26
35	9.706539	3.56	9.771592	4.79	0.228408	9.934948	25
36	9.706753		9.771880		0.228120	9.934873	24
37	9.706967		9.772168		0.227832	9.934798	23
38	9.707180		9.772457		0.227543	9.934723	22
39	9.707393		9.772745		0.227255	9.934649	21
40	9.707606	3.55	9.773033	4.78	0.226967	9.934574	20
41	9.707819		9.773321		0.226679	9.934499	19
42	9.708032		9.773608		0.226392	9.934424	18
43	9.708245		9.773896		0.226104	9.934349	17
44	9.708458		9.774184		0.225816	9.934274	16
45	9.708670	3.53	9.774471	4.77	0.225529	9.934199	15
46	9.708882		9.774759		0.225241	9.934123	14
47	9.709094		9.775046		0.224954	9.934048	13
48	9.709306		9.775333		0.224667	9.933973	12
49	9.709518		9.775621		0.224379	9.933898	11
50	9.709730	3.52	9.775908	4.76	0.224092	9.933822	10
51	9.709941		9.776195		0.223805	9.933747	9
52	9.710153		9.776482		0.223518	9.933671	8
53	9.710364		9.776768		0.223232	9.933596	7
54	9.710575		9.777055		0.222945	9.933520	6
55	9.710786	3.51	9.777342	4.75	0.222658	9.933445	5
56	9.710997		9.777628		0.222372	9.933369	4
57	9.711208		9.777915		0.222085	9.933293	3
58	9.711419		9.778201		0.221799	9.933217	2
59	9.711629		9.778488		0.221512	9.933141	1
60	9.711839		9.778774		0.221226	9.933066	0
	Cosin. 59		Cotang. 59		Tang. 59	Sin. 59	

	Sin. 31	1"	Tang. 31	1"	Cotang. 31	Cosin. 31	1"	
0	9.711839		9.778774		0.221226	9.933066		60
1	9.712050		9.779060		0.220940	9.932990		59
2	9.712260		9.779346	4.76	0.220654	9.932914	1.27	58
3	9.712469		9.779632		0.220368	9.932838		57
4	9.712679		9.779918		0.220082	9.932762		56
5	9.712889		9.780203		0.219797	9.932685		55
6	9.713098	3.49	9.780489		0.219511	9.932609		54
7	9.713308		9.780775		0.219225	9.932533		53
8	9.713517		9.781060		0.218940	9.932457		52
9	9.713726		9.781346		0.218654	9.932380		51
10	9.713935		9.781631		0.218369	9.932304		50
11	9.714144	3.48	9.781916	4.75	0.218084	9.932228	1.28	49
12	9.714352		9.782201		0.217799	9.932151		48
13	9.714561		9.782486		0.217514	9.932075		47
14	9.714769		9.782771		0.217229	9.931998		46
15	9.714978		9.783056		0.216944	9.931921		45
16	9.715186	3.46	9.783341	4.74	0.216659	9.931845	1.29	44
17	9.715394		9.783626		0.216374	9.931768		43
18	9.715602		9.783910		0.216090	9.931691		42
19	9.715809		9.784195		0.215805	9.931614		41
20	9.716017		9.784479		0.215521	9.931537		40
21	9.716224	3.45	9.784764	4.73	0.215236	9.931460	1.30	39
22	9.716432		9.785048		0.214952	9.931383		38
23	9.716639		9.785332		0.214668	9.931306		37
24	9.716846		9.785616		0.214384	9.931229		36
25	9.717053		9.785900		0.214100	9.931152		35
26	9.717259	3.44	9.786184	4.72	0.213816	9.931075	1.31	34
27	9.717466		9.786468		0.213532	9.930998		33
28	9.717673		9.786752		0.213248	9.930921		32
29	9.717879		9.787036		0.212964	9.930843		31
30	9.718085		9.787319		0.212681	9.930766		30
31	9.718291	3.43	9.787603	4.71	0.212397	9.930688	1.32	29
32	9.718497		9.787886		0.212114	9.930611		28
33	9.718703		9.788170		0.211830	9.930533		27
34	9.718909		9.788453		0.211547	9.930456		26
35	9.719114		9.788736		0.211264	9.930378		25
36	9.719320	3.42	9.789019	4.70	0.210981	9.930300	1.33	24
37	9.719525		9.789302		0.210698	9.930223		23
38	9.719730		9.789585		0.210415	9.930145		22
39	9.719935		9.789868		0.210132	9.930067		21
40	9.720140		9.790151		0.209849	9.929989		20
41	9.720345	3.41	9.790434	4.71	0.209566	9.929911	1.34	19
42	9.720549		9.790716		0.209284	9.929833		18
43	9.720754		9.790999		0.209001	9.929755		17
44	9.720958		9.791281		0.208719	9.929677		16
45	9.721162		9.791563		0.208437	9.929599		15
46	9.721366	3.40	9.791846	4.70	0.208154	9.929521	1.35	14
47	9.721570		9.792128		0.207872	9.929442		13
48	9.721774		9.792410		0.207590	9.929364		12
49	9.721978		9.792692		0.207308	9.929286		11
50	9.722181		9.792974		0.207026	9.929207		10
51	9.722385	3.39	9.793256	4.69	0.206744	9.929129	1.36	9
52	9.722588		9.793538		0.206462	9.929050		8
53	9.722791		9.793819		0.206181	9.928972		7
54	9.722994		9.794101		0.205899	9.928893		6
55	9.723197		9.794383		0.205617	9.928815		5
56	9.723400	3.38	9.794664	4.69	0.205336	9.928736	1.37	4
57	9.723603		9.794946		0.205054	9.928657		3
58	9.723805		9.795227		0.204773	9.928578		2
59	9.724007		9.795508		0.204492	9.928499		1
60	9.724210		9.795789		0.204211	9.928420		0
	Cosin. 58		Cotang. 58		Tang. 58	Sin. 58		

°	Sin. 32		°	Tang. 52		°	Cotang. 32		°	Cosin. 32		°
		1°			1°			1°			1°	
0	9.724210		0	9.795789		0	0.203211		0	9.928420		60
1	9.724412	3.36	1	9.796070	4.68	1	0.203930		1	9.928342	1.32	59
2	9.724614		2	9.796351		2	0.203649		2	9.928263		58
3	9.724816		3	9.796632		3	0.203368		3	9.928183		57
4	9.725017		4	9.796913		4	0.203087		4	9.928104		56
5	9.725219		5	9.797194		5	0.202806		5	9.928025		55
6	9.725420		6	9.797474	4.67	6	0.202525		6	9.927946		54
7	9.725622	3.35	7	9.797755		7	0.202245		7	9.927867		53
8	9.725823		8	9.798036		8	0.201964		8	9.927787		52
9	9.726024		9	9.798316		9	0.201684		9	9.927708		51
10	9.726225		10	9.798596		10	0.201404		10	9.927629		50
11	9.726426	3.34	11	9.798877		11	0.201123		11	9.927549	1.33	49
12	9.726626		12	9.799157		12	0.200843		12	9.927470		48
13	9.726827		13	9.799437		13	0.200563		13	9.927390		47
14	9.727027		14	9.799717		14	0.200283		14	9.927310		46
15	9.727228		15	9.799997		15	0.200003		15	9.927231		45
16	9.727428	3.33	16	9.800277	4.66	16	0.199723		16	9.927151		44
17	9.727628		17	9.800557		17	0.199443		17	9.927071		43
18	9.727828		18	9.800836		18	0.199164		18	9.926991		42
19	9.728027		19	9.801116		19	0.198884		19	9.926911		41
20	9.728227		20	9.801396		20	0.198604		20	9.926831		40
21	9.728427	3.32	21	9.801675	4.65	21	0.198325		21	9.926751		39
22	9.728626		22	9.801955		22	0.198045		22	9.926671		38
23	9.728825		23	9.802234		23	0.197766		23	9.926591		37
24	9.729024		24	9.802513		24	0.197487		24	9.926511		36
25	9.729223		25	9.802792		25	0.197208		25	9.926431		35
26	9.729422	3.31	26	9.803072		26	0.196928		26	9.926351	1.34	34
27	9.729621		27	9.803351		27	0.196649		27	9.926270		33
28	9.729820		28	9.803630		28	0.196370		28	9.926190		32
29	9.730018		29	9.803909		29	0.196091		29	9.926110		31
30	9.730217		30	9.804187		30	0.195813		30	9.926029		30
31	9.730415	3.30	31	9.804466	4.64	31	0.195534		31	9.925949		29
32	9.730613		32	9.804745		32	0.195255		32	9.925868		28
33	9.730811		33	9.805023		33	0.194977		33	9.925788		27
34	9.731009		34	9.805302		34	0.194698		34	9.925707		26
35	9.731206		35	9.805580		35	0.194420		35	9.925626		25
36	9.731404	3.29	36	9.805859		36	0.194141		36	9.925545	1.35	24
37	9.731602		37	9.806137		37	0.193863		37	9.925465		23
38	9.731799		38	9.806415		38	0.193585		38	9.925384		22
39	9.731996		39	9.806693		39	0.193307		39	9.925303		21
40	9.732193		40	9.806971		40	0.193029		40	9.925222		20
41	9.732390	3.28	41	9.807249	4.63	41	0.192751		41	9.925141		19
42	9.732587		42	9.807527		42	0.192473		42	9.925060		18
43	9.732784		43	9.807805		43	0.192195		43	9.924979		17
44	9.732980		44	9.808083		44	0.191917		44	9.924897		16
45	9.733177		45	9.808361		45	0.191639		45	9.924816		15
46	9.733373	3.27	46	9.808638	4.62	46	0.191362		46	9.924735	1.36	14
47	9.733569		47	9.808916		47	0.191084		47	9.924654		13
48	9.733765		48	9.809193		48	0.190807		48	9.924572		12
49	9.733961		49	9.809471		49	0.190529		49	9.924491		11
50	9.734157		50	9.809748		50	0.190252		50	9.924409		10
51	9.734353	3.26	51	9.810025		51	0.189975		51	9.924328	1.37	9
52	9.734548		52	9.810302		52	0.189698		52	9.924246		8
53	9.734744		53	9.810580		53	0.189420		53	9.924164		7
54	9.734939		54	9.810857		54	0.189143		54	9.924083		6
55	9.735135		55	9.811134		55	0.188866		55	9.924001		5
56	9.735330	3.25	56	9.811410	4.61	56	0.188590		56	9.923919		4
57	9.735525		57	9.811687		57	0.188313		57	9.923837		3
58	9.735719		58	9.811964		58	0.188036		58	9.923755		2
59	9.735914		59	9.812241		59	0.187759		59	9.923673		1
60	9.736109		60	9.812517		60	0.187483		60	9.923591		0
	Cosin. 57			Cotang. 57			Tang. 57			Sin. 57		

1	Sin. 33	1°	Tang. 33	1°	Cotang. 33	Cosin. 33	1°
0	9.736109		9.812517		0.187485	9.923591	60
1	9.736303		9.812794		0.187206	9.923509	59
2	9.736498		9.813070		0.186930	9.923427	58
3	9.736692		9.813347		0.186653	9.923345	57
4	9.736886		9.813623		0.186377	9.923263	56
5	9.737080		9.813899		0.186101	9.923181	55
6	9.737274		9.814176		0.185824	9.923098	54
7	9.737467		9.814452		0.185548	9.923016	53
8	9.737661		9.814728		0.185272	9.922933	52
9	9.737855		9.815004		0.184996	9.922851	51
10	9.738048		9.815280		0.184720	9.922768	50
11	9.738241		9.815555		0.184445	9.922686	49
12	9.738434		9.815831		0.184169	9.922603	48
13	9.738627		9.816107		0.183893	9.922520	47
14	9.738820		9.816382		0.183618	9.922438	46
15	9.739013		9.816658		0.183342	9.922355	45
16	9.739206		9.816933		0.183067	9.922272	44
17	9.739398		9.817209		0.182791	9.922189	43
18	9.739590		9.817484		0.182516	9.922106	42
19	9.739783		9.817759		0.182241	9.922023	41
20	9.739975		9.818035		0.181965	9.921940	40
21	9.740167		9.818310		0.181690	9.921857	39
22	9.740359		9.818585		0.181415	9.921774	38
23	9.740550		9.818860		0.181140	9.921691	37
24	9.740742		9.819135		0.180865	9.921607	36
25	9.740934		9.819410		0.180590	9.921524	35
26	9.741125		9.819684		0.180316	9.921441	34
27	9.741316		9.819959		0.180041	9.921357	33
28	9.741508		9.820234		0.179766	9.921274	32
29	9.741699		9.820508		0.179492	9.921190	31
30	9.741889		9.820783		0.179217	9.921107	30
31	9.742080		9.821057		0.178943	9.921023	29
32	9.742271		9.821332		0.178668	9.920939	28
33	9.742462		9.821606		0.178394	9.920856	27
34	9.742652		9.821880		0.178120	9.920772	26
35	9.742842		9.822154		0.177846	9.920688	25
36	9.743033		9.822429		0.177571	9.920604	24
37	9.743223		9.822703		0.177297	9.920520	23
38	9.743413		9.822977		0.177023	9.920436	22
39	9.743602		9.823251		0.176749	9.920352	21
40	9.743792		9.823524		0.176476	9.920268	20
41	9.743982		9.823798		0.176202	9.920184	19
42	9.744171		9.824072		0.175928	9.920099	18
43	9.744361		9.824345		0.175655	9.920015	17
44	9.744550		9.824619		0.175381	9.919931	16
45	9.744739		9.824893		0.175107	9.919846	15
46	9.744928		9.825166		0.174834	9.919762	14
47	9.745117		9.825439		0.174561	9.919677	13
48	9.745306		9.825713		0.174287	9.919593	12
49	9.745494		9.825986		0.174014	9.919508	11
50	9.745683		9.826259		0.173741	9.919424	10
51	9.745871		9.826532		0.173468	9.919339	9
52	9.746060		9.826805		0.173195	9.919254	8
53	9.746248		9.827078		0.172922	9.919169	7
54	9.746436		9.827351		0.172649	9.919085	6
55	9.746624		9.827624		0.172376	9.919000	5
56	9.746812		9.827897		0.172103	9.918915	4
57	9.746999		9.828170		0.171830	9.918830	3
58	9.747187		9.828442		0.171558	9.918745	2
59	9.747374		9.828715		0.171285	9.918659	1
60	9.747562		9.828987		0.171013	9.918574	0
	Cosin. 56		Tang. 56		Cotang. 56	Sin. 56	

1	Sin. 34	1	Tang. 34	1	Cotang. 34	Cosin. 34	1
0	9.747562		9.828987		0.171013	9.918574	60
1	9.747749		9.829260	4.54	0.170740	9.918489	59
2	9.747936	3.12	9.829532		0.170468	9.918404	58
3	9.748123		9.829805		0.170195	9.918318	57
4	9.748310		9.830077		0.169923	9.918233	56
5	9.748497		9.830349	4.53	0.169651	9.918147	55
6	9.748683	3.11	9.830621		0.169379	9.918062	54
7	9.748870		9.830893		0.169107	9.917976	53
8	9.749056		9.831165		0.168835	9.917891	52
9	9.749243		9.831437		0.168563	9.917805	51
10	9.749429		9.831709	4.52	0.168291	9.917719	50
11	9.749615	3.10	9.831981		0.168019	9.917634	49
12	9.749801		9.832253		0.167747	9.917548	48
13	9.749987		9.832525		0.167475	9.917462	47
14	9.750172		9.832796		0.167204	9.917376	46
15	9.750358		9.833068	4.51	0.166932	9.917290	45
16	9.750543	3.09	9.833339		0.166661	9.917204	44
17	9.750729		9.833611		0.166389	9.917118	43
18	9.750914		9.833882		0.166118	9.917032	42
19	9.751099		9.834154		0.165846	9.916946	41
20	9.751284		9.834425	4.50	0.165575	9.916859	40
21	9.751469	3.08	9.834696		0.165304	9.916773	39
22	9.751654		9.834967		0.165033	9.916687	38
23	9.751839		9.835238		0.164762	9.916600	37
24	9.752023		9.835509		0.164491	9.916514	36
25	9.752208		9.835780	4.49	0.164220	9.916427	35
26	9.752392	3.07	9.836051		0.163949	9.916341	34
27	9.752576		9.836322		0.163678	9.916254	33
28	9.752760		9.836593		0.163407	9.916167	32
29	9.752944		9.836864		0.163136	9.916081	31
30	9.753128		9.837134	4.48	0.162866	9.915994	30
31	9.753312	3.05	9.837405		0.162595	9.915907	29
32	9.753495		9.837675		0.162325	9.915820	28
33	9.753679		9.837946		0.162054	9.915733	27
34	9.753862		9.838216		0.161783	9.915646	26
35	9.754046		9.838487	4.47	0.161513	9.915559	25
36	9.754229		9.838757		0.161243	9.915472	24
37	9.754412		9.839027		0.160973	9.915385	23
38	9.754595		9.839297		0.160703	9.915297	22
39	9.754778		9.839568		0.160432	9.915210	21
40	9.754960		9.839838	4.46	0.160162	9.915123	20
41	9.755143	3.04	9.840108		0.159892	9.915035	19
42	9.755326		9.840378		0.159622	9.914948	18
43	9.755508		9.840648		0.159352	9.914860	17
44	9.755690		9.840917		0.159083	9.914773	16
45	9.755872		9.841187	4.45	0.158813	9.914685	15
46	9.756054	3.03	9.841457		0.158543	9.914598	14
47	9.756236		9.841727		0.158273	9.914510	13
48	9.756418		9.841996		0.158004	9.914422	12
49	9.756600		9.842266		0.157734	9.914334	11
50	9.756782		9.842535	4.44	0.157465	9.914246	10
51	9.756963	3.02	9.842805		0.157195	9.914158	9
52	9.757144		9.843074		0.156926	9.914070	8
53	9.757326		9.843343		0.156657	9.913982	7
54	9.757507		9.843612		0.156388	9.913894	6
55	9.757688		9.843882	4.43	0.156118	9.913806	5
56	9.757869	3.01	9.844151		0.155849	9.913718	4
57	9.758050		9.844420		0.155580	9.913630	3
58	9.758230		9.844689		0.155311	9.913541	2
59	9.758411		9.844958		0.155042	9.913453	1
60	9.758591		9.845227		0.154773	9.913365	0
	Cosin. 55		Cotang. 55		Tang. 55	Sin. 55	

I	Sin. 35	I°	Tang. 35	I°	Cotang. 35	Cosin. 35	I°
0	9.758591	3.00	9.845227	4.48	0.154773	9.913365	60
1	9.758772		9.845349		0.154504	9.913276	59
2	9.758952		9.845475		0.154236	9.913187	58
3	9.759132		9.845603		0.153967	9.913099	57
4	9.759312		9.845730		0.153698	9.913010	56
5	9.759492	2.99	9.845857	4.47	0.153430	9.912922	55
6	9.759672		9.845983		0.153161	9.912833	54
7	9.759852		9.846108		0.152892	9.912744	53
8	9.760031		9.846237		0.152624	9.912655	52
9	9.760211		9.846364		0.152356	9.912566	51
10	9.760390	2.98	9.846491	4.46	0.152087	9.912477	50
11	9.760569		9.846618		0.151819	9.912388	49
12	9.760748		9.846749		0.151551	9.912299	48
13	9.760927		9.846877		0.151283	9.912210	47
14	9.761106		9.846986		0.151014	9.912121	46
15	9.761285	2.97	9.847124	4.45	0.150746	9.912031	45
16	9.761464		9.847252		0.150478	9.911942	44
17	9.761642		9.847380		0.150210	9.911853	43
18	9.761821		9.847507		0.149942	9.911763	42
19	9.761999		9.847635		0.149673	9.911674	41
20	9.762177	2.96	9.847763	4.44	0.149407	9.911584	40
21	9.762356		9.847891		0.149139	9.911495	39
22	9.762534		9.848019		0.148871	9.911405	38
23	9.762712		9.848146		0.148604	9.911315	37
24	9.762889		9.848274		0.148336	9.911226	36
25	9.763067	2.95	9.848401	4.43	0.148069	9.911136	35
26	9.763245		9.848529		0.147801	9.911046	34
27	9.763422		9.848656		0.147534	9.910956	33
28	9.763600		9.848783		0.147267	9.910866	32
29	9.763777		9.848911		0.146999	9.910776	31
30	9.763954	2.94	9.849038	4.42	0.146732	9.910686	30
31	9.764131		9.849165		0.146465	9.910596	29
32	9.764308		9.849292		0.146198	9.910506	28
33	9.764485		9.849419		0.145931	9.910415	27
34	9.764662		9.849546		0.145664	9.910325	26
35	9.764838	2.93	9.849673	4.41	0.145397	9.910235	25
36	9.765015		9.849800		0.145130	9.910144	24
37	9.765191		9.849927		0.144863	9.910054	23
38	9.765367		9.850054		0.144596	9.909963	22
39	9.765544		9.850181		0.144329	9.909873	21
40	9.765720	2.92	9.850308	4.40	0.144062	9.909782	20
41	9.765896		9.850435		0.143796	9.909691	19
42	9.766072		9.850562		0.143529	9.909601	18
43	9.766247		9.850689		0.143263	9.909510	17
44	9.766423		9.850816		0.142996	9.909419	16
45	9.766598	2.91	9.850943	4.39	0.142730	9.909328	15
46	9.766774		9.851070		0.142463	9.909237	14
47	9.766949		9.851197		0.142197	9.909146	13
48	9.767124		9.851324		0.141931	9.909055	12
49	9.767300		9.851451		0.141664	9.908964	11
50	9.767475	2.90	9.851578	4.38	0.141398	9.908873	10
51	9.767649		9.851705		0.141132	9.908781	9
52	9.767824		9.851832		0.140866	9.908690	8
53	9.767999		9.851959		0.140600	9.908599	7
54	9.768173		9.852086		0.140334	9.908507	6
55	9.768348	2.89	9.852213	4.37	0.140068	9.908416	5
56	9.768522		9.852340		0.139802	9.908324	4
57	9.768697		9.852467		0.139536	9.908233	3
58	9.768871		9.852594		0.139270	9.908141	2
59	9.769045		9.852721		0.139005	9.908049	1
60	9.769219		9.852848		0.138739	9.907958	0
	Cosin. 54		Cotang. 54		Tang. 54	Sin. 54	

°	Sin. 36		°	Tang. 36		°	Cotang. 36		Cosin. 36		°
0	9.769219			9.861261			0.138739		9.907958		60
1	9.769393			9.861527			0.138473		9.907866		59
2	9.769566			9.861792			0.138208		9.907774		58
3	9.769740			9.862058			0.137942		9.907682		57
4	9.769913			9.862323			0.137677		9.907590		56
5	9.770087			9.862589			0.137411		9.907498		55
6	9.770260			9.862854			0.137146		9.907406		54
7	9.770433			9.863119			0.136881		9.907314		53
8	9.770606			9.863385			0.136615		9.907222		52
9	9.770779			9.863650			0.136350		9.907129		51
10	9.770952			9.863915			0.136085		9.907037		50
11	9.771125			9.864180			0.135820		9.906945		49
12	9.771298			9.864445			0.135555		9.906852		48
13	9.771470			9.864710			0.135290		9.906760		47
14	9.771643			9.864975			0.135025		9.906667		46
15	9.771815			9.865240			0.134760		9.906575		45
16	9.771987			9.865505			0.134495		9.906482		44
17	9.772159			9.865770			0.134230		9.906389		43
18	9.772331			9.866035			0.133965		9.906296		42
19	9.772503			9.866300			0.133700		9.906204		41
20	9.772675			9.866564			0.133435		9.906111		40
21	9.772847			9.866829			0.133171		9.906018		39
22	9.773018			9.867094			0.132906		9.905925		38
23	9.773190			9.867358			0.132642		9.905832		37
24	9.773361			9.867623			0.132377		9.905739		36
25	9.773533			9.867887			0.132113		9.905645		35
26	9.773704			9.868152			0.131848		9.905552		34
27	9.773875			9.868416			0.131584		9.905459		33
28	9.774046			9.868680			0.131320		9.905366		32
29	9.774217			9.868945			0.131055		9.905272		31
30	9.774388			9.869209			0.130791		9.905179		30
31	9.774558			9.869473			0.130527		9.905085		29
32	9.774729			9.869737			0.130263		9.904992		28
33	9.774899			9.870001			0.129999		9.904898		27
34	9.775070			9.870265			0.129735		9.904804		26
35	9.775240			9.870529			0.129471		9.904711		25
36	9.775410			9.870793			0.129207		9.904617		24
37	9.775580			9.871057			0.128943		9.904523		23
38	9.775750			9.871321			0.128679		9.904429		22
39	9.775920			9.871585			0.128415		9.904335		21
40	9.776090			9.871849			0.128151		9.904241		20
41	9.776259			9.872112			0.127888		9.904147		19
42	9.776429			9.872376			0.127624		9.904053		18
43	9.776598			9.872640			0.127360		9.903959		17
44	9.776767			9.872903			0.127097		9.903865		16
45	9.776937			9.873167			0.126833		9.903770		15
46	9.777106			9.873430			0.126570		9.903676		14
47	9.777275			9.873694			0.126306		9.903581		13
48	9.777444			9.873957			0.126043		9.903487		12
49	9.777613			9.874220			0.125780		9.903392		11
50	9.777781			9.874484			0.125516		9.903298		10
51	9.777950			9.874747			0.125253		9.903203		9
52	9.778119			9.875010			0.124990		9.903108		8
53	9.778287			9.875273			0.124727		9.903014		7
54	9.778455			9.875537			0.124463		9.902919		6
55	9.778624			9.875800			0.124200		9.902824		5
56	9.778792			9.876063			0.123937		9.902729		4
57	9.778960			9.876326			0.123674		9.902634		3
58	9.779128			9.876589			0.123411		9.902539		2
59	9.779295			9.876852			0.123148		9.902444		1
60	9.779463			9.877114			0.122886		9.902349		0
	Cosin. 53			Cotang. 53			Tang. 53		Sin. 53		

Sin. 37	Tang. 37	Cotang. 37	Cosin. 37	
0 9.779463	9.877114	0.122886	9.902349	60
1 9.779631	9.877377	0.122623	9.902253	59
2 9.779798	9.877640	0.122360	9.902158	58
3 9.779966	9.877903	0.122097	9.902063	57
4 9.780133	9.878165	0.121835	9.901967	56
5 9.780300	9.878428	0.121572	9.901872	55
6 9.780467	9.878691	0.121309	9.901776	54
7 9.780634	9.878953	0.121047	9.901681	53
8 9.780801	9.879216	0.120784	9.901585	52
9 9.780968	9.879478	0.120522	9.901490	51
10 9.781134	9.879741	0.120259	9.901394	50
11 9.781301	9.880003	0.119997	9.901298	49
12 9.781468	9.880265	0.119735	9.901202	48
13 9.781634	9.880528	0.119472	9.901106	47
14 9.781800	9.880790	0.119210	9.901010	46
15 9.781966	9.881052	0.118948	9.900914	45
16 9.782132	9.881314	0.118686	9.900818	44
17 9.782298	9.881577	0.118423	9.900722	43
18 9.782464	9.881839	0.118161	9.900626	42
19 9.782630	9.882101	0.117899	9.900529	41
20 9.782796	9.882363	0.117637	9.900433	40
21 9.782961	9.882625	0.117375	9.900337	39
22 9.783127	9.882887	0.117113	9.900240	38
23 9.783292	9.883148	0.116852	9.900144	37
24 9.783458	9.883410	0.116590	9.900047	36
25 9.783623	9.883672	0.116328	9.899951	35
26 9.783788	9.883934	0.116066	9.899854	34
27 9.783953	9.884196	0.115804	9.899757	33
28 9.784118	9.884457	0.115543	9.899660	32
29 9.784282	9.884719	0.115281	9.899564	31
30 9.784447	9.884980	0.115020	9.899467	30
31 9.784612	9.885242	0.114758	9.899370	29
32 9.784776	9.885504	0.114496	9.899273	28
33 9.784941	9.885765	0.114235	9.899176	27
34 9.785105	9.886026	0.113974	9.899078	26
35 9.785269	9.886288	0.113712	9.898981	25
36 9.785433	9.886549	0.113451	9.898884	24
37 9.785597	9.886811	0.113189	9.898787	23
38 9.785761	9.887072	0.112928	9.898689	22
39 9.785925	9.887333	0.112667	9.898592	21
40 9.786089	9.887594	0.112406	9.898494	20
41 9.786252	9.887855	0.112145	9.898397	19
42 9.786416	9.888116	0.111884	9.898299	18
43 9.786579	9.888378	0.111622	9.898202	17
44 9.786742	9.888639	0.111361	9.898104	16
45 9.786906	9.888900	0.111100	9.898006	15
46 9.787069	9.889161	0.110839	9.897908	14
47 9.787232	9.889421	0.110579	9.897810	13
48 9.787395	9.889682	0.110318	9.897712	12
49 9.787557	9.889943	0.110057	9.897614	11
50 9.787720	9.890204	0.109796	9.897516	10
51 9.787883	9.890465	0.109535	9.897418	9
52 9.788045	9.890725	0.109275	9.897320	8
53 9.788208	9.890986	0.109014	9.897222	7
54 9.788370	9.891247	0.108753	9.897123	6
55 9.788532	9.891507	0.108493	9.897025	5
56 9.788694	9.891768	0.108232	9.896926	4
57 9.788856	9.892028	0.107972	9.896828	3
58 9.789018	9.892289	0.107711	9.896729	2
59 9.789180	9.892549	0.107451	9.896631	1
60 9.789342	9.892810	0.107190	9.896532	0
Cosin. 53	Cotang. 52	Tang. 52	Sin. 52	1

	Sin. 38	I°	Tang. 38	I°	Cotang. 38	Cosin. 38	I°	
0	9.789342	2.69	9.892810	4.34	0.107190	9.896532	1.64	60
1	9.789504		9.893070		0.106930	9.896433		59
2	9.789665		9.893331		0.106669	9.896335		58
3	9.789827		9.893591		0.106409	9.896236		57
4	9.789988	2.68	9.893851	4.33	0.106149	9.896137	1.65	56
5	9.790149		9.894111		0.105889	9.896038		55
6	9.790310		9.894372		0.105628	9.895939		54
7	9.790471		9.894632		0.105368	9.895840		53
8	9.790632	2.67	9.894892	4.32	0.105108	9.895741	1.66	52
9	9.790793		9.895152		0.104848	9.895641		51
10	9.790954		9.895412		0.104588	9.895542		50
11	9.791115		9.895672		0.104328	9.895443	1.67	49
12	9.791275	2.66	9.895932	4.31	0.104068	9.895343		48
13	9.791436		9.896192		0.103808	9.895244		47
14	9.791596		9.896452		0.103548	9.895145		46
15	9.791757		9.896712		0.103288	9.895045	1.68	45
16	9.791917	2.65	9.896971	4.30	0.103029	9.894945		44
17	9.792077		9.897231		0.102769	9.894846		43
18	9.792237		9.897491		0.102509	9.894746		42
19	9.792397		9.897751		0.102249	9.894646	1.69	41
20	9.792557	2.64	9.898010	4.29	0.101990	9.894546		40
21	9.792716		9.898270		0.101730	9.894446		39
22	9.792876		9.898530		0.101470	9.894346		38
23	9.793035		9.898789		0.101211	9.894246	1.70	37
24	9.793195	2.63	9.899049	4.28	0.100951	9.894146		36
25	9.793354		9.899308		0.100692	9.894046		35
26	9.793514		9.899568		0.100432	9.893946		34
27	9.793673		9.899827		0.100173	9.893846	1.71	33
28	9.793832	2.62	9.900087	4.27	0.099913	9.893745		32
29	9.793991		9.900346		0.099654	9.893645		31
30	9.794150		9.900605		0.099395	9.893544		30
31	9.794308		9.900864		0.099136	9.893444	1.72	29
32	9.794467	2.61	9.901124	4.26	0.098876	9.893343		28
33	9.794626		9.901383		0.098617	9.893243		27
34	9.794784		9.901642		0.098358	9.893142		26
35	9.794942		9.901901		0.098099	9.893041	1.73	25
36	9.795101	2.60	9.902160	4.25	0.097840	9.892940		24
37	9.795259		9.902420		0.097580	9.892839		23
38	9.795417		9.902679		0.097321	9.892739		22
39	9.795575		9.902938		0.097062	9.892638	1.74	21
40	9.795733	2.59	9.903197	4.24	0.096803	9.892536		20
41	9.795891		9.903456		0.096544	9.892435		19
42	9.796049		9.903714		0.096286	9.892334		18
43	9.796206		9.903973		0.096027	9.892233	1.75	17
44	9.796364	2.58	9.904232	4.23	0.095768	9.892132		16
45	9.796521		9.904491		0.095509	9.892030		15
46	9.796679		9.904750		0.095250	9.891929		14
47	9.796836		9.905009		0.094991	9.891827	1.76	13
48	9.796993	2.57	9.905267	4.22	0.094733	9.891726		12
49	9.797150		9.905526		0.094474	9.891624		11
50	9.797307		9.905785		0.094215	9.891523		10
51	9.797464	2.56	9.906043	4.21	0.093957	9.891421	1.77	9
52	9.797621		9.906302		0.093698	9.891319		8
53	9.797777		9.906560		0.093440	9.891217		7
54	9.797934		9.906819		0.093181	9.891115		6
55	9.798091	2.55	9.907077	4.20	0.092923	9.891013	1.78	5
56	9.798247		9.907336		0.092664	9.890911		4
57	9.798403		9.907594		0.092406	9.890809		3
58	9.798560		9.907853		0.092147	9.890707		2
59	9.798716	2.54	9.908111	4.19	0.091889	9.890605	1.79	1
60	9.798872		9.908369		0.091631	9.890503		0
	Cosin. 51		Cotang. 51		Tang. 51	Sin. 51		

1	Sin. 39	1"	Tang. 39	1'	Cosang. 39	Cosin. 39	1"
0	9.798872	2.60	9.908369	4.30	0.091631	9.890503	60
1	9.799028		9.908628		0.091372	9.890500	59
2	9.799184		9.908886		0.091114	9.890298	58
3	9.799339		9.909144		0.090856	9.890195	57
4	9.799495		9.909402		0.090598	9.890093	56
5	9.799651	2.59	9.909660	4.29	0.090340	9.889990	55
6	9.799806		9.909918		0.090082	9.889888	54
7	9.799962		9.910177		0.089823	9.889785	53
8	9.800117		9.910435		0.089565	9.889682	52
9	9.800272		9.910693		0.089307	9.889579	51
10	9.800427	2.58	9.910951	4.29	0.089049	9.889477	50
11	9.800582		9.911209		0.088791	9.889374	49
12	9.800737		9.911467		0.088533	9.889271	48
13	9.800892		9.911725		0.088275	9.889168	47
14	9.801047		9.911982		0.088018	9.889064	46
15	9.801201	2.57	9.912240	4.29	0.087760	9.888961	45
16	9.801356		9.912498		0.087502	9.888858	44
17	9.801511		9.912756		0.087244	9.888755	43
18	9.801665		9.913014		0.086986	9.888651	42
19	9.801819		9.913271		0.086729	9.888548	41
20	9.801973	2.56	9.913529	4.29	0.086471	9.888444	40
21	9.802128		9.913787		0.086213	9.888341	39
22	9.802282		9.914044		0.085956	9.888237	38
23	9.802436		9.914302		0.085698	9.888134	37
24	9.802589		9.914560		0.085440	9.888030	36
25	9.802743	2.55	9.914817	4.28	0.085183	9.887926	35
26	9.802897		9.915075		0.084925	9.887822	34
27	9.803050		9.915332		0.084668	9.887718	33
28	9.803204		9.915590		0.084410	9.887614	32
29	9.803357		9.915847		0.084153	9.887510	31
30	9.803511	2.54	9.916104	4.28	0.083896	9.887406	30
31	9.803664		9.916362		0.083638	9.887302	29
32	9.803817		9.916619		0.083381	9.887198	28
33	9.803970		9.916877		0.083123	9.887093	27
34	9.804123		9.917134		0.082866	9.886989	26
35	9.804276	2.53	9.917391	4.28	0.082609	9.886885	25
36	9.804428		9.917648		0.082352	9.886780	24
37	9.804581		9.917906		0.082094	9.886676	23
38	9.804734		9.918163		0.081837	9.886571	22
39	9.804886		9.918420		0.081580	9.886466	21
40	9.805039	2.52	9.918677	4.28	0.081323	9.886362	20
41	9.805191		9.918934		0.081066	9.886257	19
42	9.805343		9.919191		0.080809	9.886152	18
43	9.805495		9.919448		0.080552	9.886047	17
44	9.805647		9.919705		0.080295	9.885943	16
45	9.805799	2.51	9.919962	4.27	0.080038	9.885837	15
46	9.805951		9.920219		0.079781	9.885732	14
47	9.806103		9.920476		0.079524	9.885627	13
48	9.806254		9.920733		0.079267	9.885522	12
49	9.806406		9.920990		0.079010	9.885416	11
50	9.806557	2.50	9.921247	4.27	0.078753	9.885311	10
51	9.806709		9.921503		0.078497	9.885205	9
52	9.806860		9.921760		0.078240	9.885100	8
53	9.807011		9.922017		0.077983	9.884994	7
54	9.807163		9.922274		0.077726	9.884889	6
55	9.807314	2.50	9.922530	4.27	0.077470	9.884783	5
56	9.807465		9.922787		0.077213	9.884677	4
57	9.807615		9.923044		0.076956	9.884572	3
58	9.807766		9.923300		0.076700	9.884466	2
59	9.807917		9.923557		0.076443	9.884360	1
60	9.808067		9.923814		0.076186	9.884254	0
Cosin. 50			Cosang. 50		Tang. 50	Sin. 50	1

r	Sin. 40	1°	Tang. 40	1°	Cotang. 40	Cosin. 40	1°
0	9.808007	2.51	9.923814	4.27	0.076186	9.884254	60
1	9.808218		9.924070		0.075930	9.884148	59
2	9.808368		9.924327		0.075673	9.884042	58
3	9.808519		9.924583		0.075417	9.883936	57
4	9.808669		9.924840		0.075160	9.883829	56
5	9.808819	2.50	9.925096		0.074904	9.883723	55
6	9.808969		9.925352		0.074648	9.883617	54
7	9.809119		9.925609		0.074391	9.883510	53
8	9.809269		9.925865		0.074135	9.883404	52
9	9.809419		9.926122		0.073878	9.883297	51
10	9.809569	2.49	9.926378		0.073622	9.883191	50
11	9.809718		9.926634		0.073366	9.883084	49
12	9.809868		9.926890		0.073110	9.882977	48
13	9.810017		9.927147		0.072853	9.882871	47
14	9.810167		9.927403		0.072597	9.882764	46
15	9.810316	2.48	9.927659		0.072341	9.882657	45
16	9.810465		9.927915		0.072085	9.882550	44
17	9.810614		9.928171		0.071829	9.882443	43
18	9.810763		9.928427		0.071573	9.882336	42
19	9.810912		9.928684		0.071316	9.882229	41
20	9.811061	2.47	9.928940	4.26	0.071060	9.882121	40
21	9.811210		9.929196		0.070804	9.882014	39
22	9.811368		9.929452		0.070548	9.881907	38
23	9.811507		9.929708		0.070292	9.881799	37
24	9.811655		9.929964		0.070036	9.881692	36
25	9.811804	2.46	9.930220	4.25	0.069780	9.881584	35
26	9.811952		9.930475		0.069525	9.881477	34
27	9.812100		9.930731		0.069269	9.881369	33
28	9.812248		9.930987		0.069013	9.881261	32
29	9.812396		9.931243		0.068757	9.881153	31
30	9.812544	2.45	9.931499		0.068501	9.881046	30
31	9.812692		9.931755		0.068245	9.880938	29
32	9.812840		9.932010		0.067990	9.880830	28
33	9.812988		9.932266		0.067734	9.880722	27
34	9.813135		9.932522		0.067478	9.880613	26
35	9.813283	2.45	9.932778	4.25	0.067222	9.880505	25
36	9.813430		9.933033		0.066967	9.880397	24
37	9.813578		9.933289		0.066711	9.880289	23
38	9.813725		9.933545		0.066455	9.880180	22
39	9.813872		9.933800		0.066200	9.880072	21
40	9.814019	2.44	9.934056	4.25	0.065944	9.879963	20
41	9.814166		9.934311		0.065689	9.879855	19
42	9.814313		9.934567		0.065433	9.879746	18
43	9.814460		9.934822		0.065178	9.879637	17
44	9.814607		9.935078		0.064922	9.879529	16
45	9.814753	2.43	9.935333	4.25	0.064667	9.879420	15
46	9.814900		9.935589		0.064411	9.879311	14
47	9.815046		9.935844		0.064156	9.879202	13
48	9.815193		9.936100		0.063900	9.879093	12
49	9.815339		9.936355		0.063645	9.878984	11
50	9.815485	2.43	9.936611	4.25	0.063389	9.878875	10
51	9.815632		9.936866		0.063134	9.878766	9
52	9.815778		9.937121		0.062879	9.878656	8
53	9.815924		9.937377		0.062623	9.878547	7
54	9.816069		9.937632		0.062368	9.878438	6
55	9.816215	2.43	9.937887	4.25	0.062113	9.878328	5
56	9.816361		9.938142		0.061858	9.878219	4
57	9.816507		9.938398		0.061602	9.878109	3
58	9.816652		9.938653		0.061347	9.877999	2
59	9.816798		9.938908		0.061092	9.877890	1
60	9.816943		9.939163		0.060837	9.877780	0
	Cosin. 49		Cotang. 49		Tang. 49	Sin. 49	

$\frac{1}{2}$	Sin. $\frac{1}{2}$	1°	Tang. $\frac{1}{2}$	1°	Cotang. $\frac{1}{2}$	Cosin. $\frac{1}{2}$	1°
0	9.816943	2.42	9.939163	4.25	0.060837	9.877780	60
1	9.817088		9.939418		0.060582	9.877670	59
2	9.817233		9.939673		0.060327	9.877560	58
3	9.817379		9.939928		0.060072	9.877450	57
4	9.817524	2.41	9.940183	4.25	0.059817	9.877340	56
5	9.817668		9.940439		0.059561	9.877230	55
6	9.817813		9.940694		0.059306	9.877120	54
7	9.817958		9.940949		0.059051	9.877010	53
8	9.818103	2.40	9.941204	4.25	0.058796	9.876899	52
9	9.818247		9.941459		0.058541	9.876789	51
10	9.818392		9.941713		0.058287	9.876678	50
11	9.818536		9.941968		0.058032	9.876568	49
12	9.818681	2.39	9.942223	4.25	0.057777	9.876457	48
13	9.818825		9.942478		0.057522	9.876347	47
14	9.818969		9.942733		0.057267	9.876236	46
15	9.819113		9.942988		0.057012	9.876125	45
16	9.819257	2.38	9.943243	4.25	0.056757	9.876014	44
17	9.819401		9.943498		0.056502	9.875904	43
18	9.819545		9.943752		0.056248	9.875793	42
19	9.819689		9.944007		0.055993	9.875682	41
20	9.819832	2.37	9.944262	4.25	0.055738	9.875571	40
21	9.819976		9.944517		0.055483	9.875459	39
22	9.820120		9.944771		0.055229	9.875348	38
23	9.820263		9.945026		0.054974	9.875237	37
24	9.820406	2.36	9.945281	4.25	0.054719	9.875126	36
25	9.820550		9.945535		0.054465	9.875014	35
26	9.820693		9.945790		0.054210	9.874903	34
27	9.820836		9.946045		0.053955	9.874791	33
28	9.820979	2.35	9.946299	4.25	0.053701	9.874680	32
29	9.821122		9.946554		0.053446	9.874568	31
30	9.821265		9.946808		0.053192	9.874456	30
31	9.821407		9.947063		0.052937	9.874344	29
32	9.821550	2.34	9.947318	4.25	0.052682	9.874232	28
33	9.821693		9.947572		0.052428	9.874121	27
34	9.821835		9.947827		0.052173	9.874009	26
35	9.821977		9.948081		0.051919	9.873896	25
36	9.822120	2.33	9.948335	4.25	0.051665	9.873784	24
37	9.822262		9.948590		0.051410	9.873672	23
38	9.822404		9.948844		0.051156	9.873560	22
39	9.822546		9.949099		0.050901	9.873448	21
40	9.822688	2.32	9.949353	4.25	0.050647	9.873335	20
41	9.822830		9.949608		0.050392	9.873223	19
42	9.822972		9.949862		0.050138	9.873110	18
43	9.823114		9.950116		0.049884	9.872998	17
44	9.823255	2.31	9.950371	4.25	0.049629	9.872885	16
45	9.823397		9.950625		0.049375	9.872772	15
46	9.823539		9.950879		0.049121	9.872659	14
47	9.823680		9.951133		0.048867	9.872547	13
48	9.823821	2.30	9.951388	4.25	0.048612	9.872434	12
49	9.823963		9.951642		0.048358	9.872321	11
50	9.824104		9.951896		0.048104	9.872208	10
51	9.824245		9.952150		0.047850	9.872095	9
52	9.824386	2.29	9.952405	4.25	0.047595	9.871981	8
53	9.824527		9.952659		0.047341	9.871868	7
54	9.824668		9.952913		0.047087	9.871755	6
55	9.824808		9.953167		0.046833	9.871641	5
56	9.824949	2.28	9.953421	4.25	0.046579	9.871528	4
57	9.825090		9.953675		0.046325	9.871414	3
58	9.825230		9.953929		0.046071	9.871301	2
59	9.825371		9.954183		0.045817	9.871187	1
60	9.825511		9.954437		0.045563	9.871073	0
	Cosin. 48		Cotang. 48		Tang. 48	Sin. 48	

1	Sin. 42	1°	Tang. 42	1°	Cotang. 42	Cosin. 42	1°
0	9.825511	2.33	9.954437	4.23	9.043563	9.871073	60
1	9.825651		9.954691		9.043309	9.870960	59
2	9.825791		9.954946		9.043054	9.870846	58
3	9.825931		9.955200		9.042800	9.870732	57
4	9.826071		9.955454		9.042546	9.870618	56
5	9.826211	2.32	9.955708	4.23	9.042292	9.870504	55
6	9.826351		9.955961		9.042039	9.870390	54
7	9.826491		9.956215		9.041785	9.870276	53
8	9.826631		9.956469		9.041531	9.870161	52
9	9.826770		9.956723		9.041277	9.870047	51
10	9.826910	2.32	9.956977	4.23	9.041023	9.869933	50
11	9.827049		9.957231		9.040769	9.869818	49
12	9.827189		9.957485		9.040515	9.869704	48
13	9.827328		9.957739		9.040261	9.869589	47
14	9.827467		9.957993		9.040007	9.869474	46
15	9.827606	2.31	9.958247	4.23	9.039753	9.869360	45
16	9.827745		9.958500		9.039500	9.869245	44
17	9.827884		9.958754		9.039246	9.869130	43
18	9.828023		9.959008		9.038992	9.869015	42
19	9.828162		9.959262		9.038738	9.868900	41
20	9.828301	2.31	9.959516	4.23	9.038484	9.868785	40
21	9.828439		9.959769		9.038231	9.868670	39
22	9.828578		9.960023		9.037977	9.868555	38
23	9.828716		9.960277		9.037723	9.868440	37
24	9.828855		9.960530		9.037470	9.868324	36
25	9.828993	2.30	9.960784	4.23	9.037216	9.868209	35
26	9.829131		9.961038		9.036962	9.868093	34
27	9.829269		9.961292		9.036708	9.867978	33
28	9.829407		9.961545		9.036455	9.867862	32
29	9.829545		9.961799		9.036201	9.867747	31
30	9.829683	2.29	9.962052	4.23	9.035948	9.867631	30
31	9.829821		9.962306		9.035694	9.867515	29
32	9.829959		9.962560		9.035440	9.867399	28
33	9.830097		9.962813		9.035187	9.867283	27
34	9.830234		9.963067		9.034933	9.867167	26
35	9.830372	2.29	9.963320	4.23	9.034680	9.867051	25
36	9.830509		9.963574		9.034426	9.866935	24
37	9.830646		9.963828		9.034172	9.866819	23
38	9.830784		9.964081		9.033919	9.866703	22
39	9.830921		9.964335		9.033665	9.866586	21
40	9.831058	2.28	9.964588	4.23	9.033412	9.866470	20
41	9.831195		9.964842		9.033158	9.866353	19
42	9.831332		9.965095		9.032905	9.866237	18
43	9.831469		9.965349		9.032651	9.866120	17
44	9.831606		9.965602		9.032398	9.866004	16
45	9.831742	2.27	9.965855	4.23	9.032145	9.865887	15
46	9.831879		9.966109		9.031891	9.865770	14
47	9.832015		9.966362		9.031638	9.865653	13
48	9.832152		9.966616		9.031384	9.865536	12
49	9.832288		9.966869		9.031131	9.865419	11
50	9.832425	2.27	9.967123	4.23	9.030877	9.865302	10
51	9.832561		9.967376		9.030624	9.865185	9
52	9.832697		9.967629		9.030371	9.865068	8
53	9.832833		9.967883		9.030117	9.864950	7
54	9.832969		9.968136		9.029864	9.864833	6
55	9.833105	2.26	9.968389	4.23	9.029611	9.864716	5
56	9.833241		9.968643		9.029357	9.864598	4
57	9.833377		9.968896		9.029104	9.864481	3
58	9.833512		9.969149		9.028851	9.864363	2
59	9.833648		9.969403		9.028597	9.864245	1
60	9.833783		9.969656		9.028344	9.864127	0
	Cosin. 47		Cotang. 47		Tang. 47	Sin. 47	1°

1	Sin 43	1°	Tang. 43	1°	Cotang. 43	Cosin. 43	1°	
0	9.833783		9.969656		0.030344	9.864127		60
1	9.833919		9.969909		0.030091	9.864010		59
2	9.834054		9.970162		0.029838	9.863892		58
3	9.834189		9.970416		0.029584	9.863774		57
4	9.834323		9.970669		0.029331	9.863656		56
5	9.834460		9.970922		0.029078	9.863538		55
6	9.834595		9.971175		0.028825	9.863419		54
7	9.834730		9.971429		0.028571	9.863301		53
8	9.834865		9.971682		0.028318	9.863183		52
9	9.834999		9.971935		0.028065	9.863064		51
10	9.835134		9.972188		0.027812	9.862946		50
11	9.835269		9.972441		0.027559	9.862827		49
12	9.835403		9.972695		0.027305	9.862709		48
13	9.835538		9.972948		0.027052	9.862590		47
14	9.835672		9.973201		0.026799	9.862471		46
15	9.835807		9.973454		0.026546	9.862353		45
16	9.835941		9.973707		0.026293	9.862234		44
17	9.836075		9.973960		0.026040	9.862115		43
18	9.836209		9.974213		0.025787	9.861996		42
19	9.836343		9.974466		0.025534	9.861877		41
20	9.836477		9.974720		0.025280	9.861758		40
21	9.836611		9.974973		0.025027	9.861638		39
22	9.836745		9.975226		0.024774	9.861519		38
23	9.836878		9.975479		0.024521	9.861400		37
24	9.837012		9.975732		0.024268	9.861280		36
25	9.837146		9.975985		0.024015	9.861161		35
26	9.837279		9.976238		0.023762	9.861041		34
27	9.837412		9.976491		0.023509	9.860922		33
28	9.837546		9.976744		0.023256	9.860802		32
29	9.837679		9.976997		0.023003	9.860682		31
30	9.837812		9.977250		0.022750	9.860562		30
31	9.837945		9.977503		0.022497	9.860442		29
32	9.838078		9.977756		0.022244	9.860322		28
33	9.838211		9.978009		0.021991	9.860202		27
34	9.838344		9.978262		0.021738	9.860082		26
35	9.838477		9.978515		0.021485	9.859962		25
36	9.838610		9.978768		0.021232	9.859842		24
37	9.838742		9.979021		0.020979	9.859721		23
38	9.838875		9.979274		0.020726	9.859601		22
39	9.839007		9.979527		0.020473	9.859480		21
40	9.839140		9.979780		0.020220	9.859360		20
41	9.839272		9.980033		0.019967	9.859239		19
42	9.839404		9.980286		0.019714	9.859119		18
43	9.839536		9.980538		0.019462	9.858998		17
44	9.839668		9.980791		0.019209	9.858877		16
45	9.839800		9.981044		0.018956	9.858756		15
46	9.839932		9.981297		0.018703	9.858635		14
47	9.840064		9.981550		0.018450	9.858514		13
48	9.840196		9.981803		0.018197	9.858393		12
49	9.840328		9.982056		0.017944	9.858272		11
50	9.840459		9.982309		0.017691	9.858151		10
51	9.840591		9.982562		0.017438	9.858029		9
52	9.840722		9.982814		0.017186	9.857908		8
53	9.840854		9.983067		0.016933	9.857786		7
54	9.840985		9.983320		0.016680	9.857665		6
55	9.841116		9.983573		0.016427	9.857543		5
56	9.841247		9.983826		0.016174	9.857422		4
57	9.841378		9.984079		0.015921	9.857300		3
58	9.841509		9.984332		0.015668	9.857178		2
59	9.841640		9.984584		0.015416	9.857056		1
60	9.841771		9.984837		0.015163	9.856934		0
	Cosin. 46		Cotang. 46		Tang. 46	Sin. 46		1

<i>r</i>	Sin. 44	<i>r</i>	Tang. 44	<i>r</i>	Cotang. 44	Cosin. 44	<i>r</i>
0	9.841771	2.18	9.984837	4.21	0.015163	9.856934	60
1	9.841902		9.985090		0.014910	9.856812	59
2	9.842033		9.985343		0.014657	9.856690	58
3	9.842163		9.985596		0.014404	9.856568	57
4	9.842294		9.985848		0.014152	9.856446	56
5	9.842424	2.17	9.986101	4.21	0.013899	9.856323	55
6	9.842555		9.986354		0.013646	9.856201	54
7	9.842685		9.986607		0.013393	9.856078	53
8	9.842815		9.986860		0.013140	9.855956	52
9	9.842946		9.987112		0.012888	9.855833	51
10	9.843076	2.16	9.987365	4.21	0.012635	9.855711	50
11	9.843206		9.987618		0.012382	9.855588	49
12	9.843336		9.987871		0.012129	9.855465	48
13	9.843466		9.988123		0.011877	9.855342	47
14	9.843595		9.988376		0.011624	9.855219	46
15	9.843725	2.15	9.988629	4.21	0.011371	9.855096	45
16	9.843855		9.988882		0.011118	9.854973	44
17	9.843984		9.989134		0.010866	9.854850	43
18	9.844114		9.989387		0.010613	9.854727	42
19	9.844243		9.989640		0.010360	9.854603	41
20	9.844372	2.15	9.989893	4.21	0.010107	9.854480	40
21	9.844502		9.990145		0.009855	9.854356	39
22	9.844631		9.990398		0.009602	9.854233	38
23	9.844760		9.990651		0.009349	9.854109	37
24	9.844889		9.990903		0.009097	9.853986	36
25	9.845018	2.14	9.991156	4.21	0.008844	9.853862	35
26	9.845147		9.991409		0.008591	9.853738	34
27	9.845276		9.991662		0.008338	9.853614	33
28	9.845405		9.991914		0.008086	9.853490	32
29	9.845533		9.992167		0.007833	9.853366	31
30	9.845662	2.14	9.992420	4.21	0.007580	9.853242	30
31	9.845790		9.992672		0.007328	9.853118	29
32	9.845919		9.992925		0.007075	9.852994	28
33	9.846047		9.993178		0.006822	9.852869	27
34	9.846175		9.993431		0.006569	9.852745	26
35	9.846304	2.13	9.993683	4.21	0.006317	9.852620	25
36	9.846432		9.993936		0.006064	9.852496	24
37	9.846560		9.994189		0.005811	9.852371	23
38	9.846688		9.994441		0.005559	9.852247	22
39	9.846816		9.994694		0.005306	9.852122	21
40	9.846944	2.12	9.994947	4.21	0.005053	9.851997	20
41	9.847071		9.995199		0.004801	9.851872	19
42	9.847199		9.995452		0.004548	9.851747	18
43	9.847327		9.995705		0.004295	9.851622	17
44	9.847454		9.995957		0.004043	9.851497	16
45	9.847582	2.12	9.996210	4.21	0.003790	9.851372	15
46	9.847709		9.996463		0.003537	9.851246	14
47	9.847836		9.996715		0.003285	9.851121	13
48	9.847964		9.996968		0.003032	9.850996	12
49	9.848091		9.997221		0.002779	9.850870	11
50	9.848218	2.11	9.997473	4.21	0.002527	9.850745	10
51	9.848345		9.997726		0.002274	9.850619	9
52	9.848472		9.997979		0.002021	9.850493	8
53	9.848599		9.998231		0.001769	9.850368	7
54	9.848726		9.998484		0.001516	9.850242	6
55	9.848852	2.11	9.998737	4.21	0.001263	9.850116	5
56	9.848979		9.998989		0.001011	9.849990	4
57	9.849106		9.999242		0.000758	9.849864	3
58	9.849232		9.999495		0.000506	9.849738	2
59	9.849359		9.999747		0.000253	9.849611	1
60	9.849485		0.000000		0.000000	9.849485	
	Cosin. 45		Cotang. 45		Tang. 45	Sin. 45	

TABLES
CENTÉSIMALES.

O. 000.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
00000			10.000000			Infin.	1.000000
001	5.196120	301030	10.000000	5.196120	301030	14.803880	0.999999
002	497150	176091		497150	176091	502850	998
003	673241	124939		673241	124939	326759	997
004	798180	96910		798180	96910	201820	996
005	895090	79181		895090	79181	104910	995
006	5.974271	66947		5.974271	66947	14.025729	994
007	6.041218	57992		6.041218	57992	13.958782	993
008	009210	51153		009210	51152	900790	992
009	150362	45758		150362	45758	840638	991
00010	196120	41393		196120	41393	803880	0.999990
011	237513	37788		237513	37788	762487	989
012	275301	34762		275301	34762	724699	988
013	310063	32185		310063	32185	689937	987
014	342248	29963		342248	29963	657752	986
015	372211	28029		372211	28029	627789	985
016	400240	26329		400240	26329	599760	984
017	426569	24823		426569	24823	573431	983
018	451392	23482		451392	23482	548608	982
019	474874	22276		474874	22276	525127	981
00020	497150	21189		497150	21189	502850	0.999980
021	518330	20204		518330	20204	481661	979
022	538543	19305		538543	19305	461457	978
023	557848	18483		557848	18483	442152	977
024	576331	17729		576331	17729	423669	976
025	594060	17033	10.000000	594060	17033	405940	975
026	611093	16391		611093	16391	388907	974
027	627484	15794		627484	15794	372516	973
028	643278	15240		643278	15240	356722	972
029	658518	14723		658518	14723	341482	971
00030	673241	14241		673241	14241	326759	0.999970
031	687482	13788		687482	13788	312518	969
032	701270	13364		701270	13364	298730	968
033	714634	12965		714634	12965	285366	967
034	727599	12589		727599	12589	272401	966
035	740188	12234		740188	12234	259812	965
036	752422	11900		752422	11900	247578	964
037	764322	11581		764322	11582	235678	963
038	775903	11282		775903	11281	224097	962
039	787185	10995		787185	10995	212816	961
00040	798180	10724		798180	10724	201820	0.999960
041	808904	10465		808904	10465	191096	959
042	819369	10219		819369	10219	180631	958
043	829588	9985		829588	9985	170412	957
044	839573	9759		839573	9760	160427	956
045	849332	9546		849333	9545	150667	955
046	858878	9340		858878	9340	141122	954
047	868218	9143		868218	9143	131782	953
048	877361	8955		877361	8955	122639	952
049	886316	8774		886316	8774	113684	951
0.00050	6.895090		10.000000	6.895090		13.104910	0.999950
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.000

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.00050	6.895090	8600	10.000000	6.895090	8600	13.104910	0.99950
051	903690	8433	10.000000	903690	8433	096310	949
052	912123	8273		912123	8273	087877	948
053	920396	8118		920396	8118	079604	947
054	928514	7969		928514	7969	071486	946
055	936483	7825		936483	7825	063517	945
056	944308	7687		944308	7687	055692	944
057	951995	7553		951995	7553	048005	943
058	959548	7424		959548	7424	040452	942
059	966972	7299		966972	7299	033028	941
0.00060	974271	7179		974271	7179	025729	0.99940
061	981450	7062		981450	7062	018550	939
062	988512	6949		988512	6949	011488	938
063	6.995461	6839		6.995461	6839	13.004539	937
064	7.002300	6733		7.002300	6733	12.997700	936
065	009033	6631		009033	6631	990967	935
066	015664	6531		015664	6531	984336	934
067	022195	6434		022195	6434	977805	933
068	028629	6340		028629	6340	971371	932
069	034969	6249		034969	6249	965031	931
0.00070	041218	6160		041218	6160	958782	0.99930
071	047378	6075		047378	6075	952622	929
072	053452	5990		053452	5990	946547	928
073	059443	5909		059443	5909	940557	927
074	065352	5829		065352	5829	934648	926
075	071181	5752	10.000000	071181	5752	928819	925
076	076933	5678		076933	5678	923066	924
077	082611	5603		082611	5603	917389	923
078	088215	5533		088215	5533	911785	922
079	093747	5463		093747	5463	906253	921
0.00080	099210	5395		099210	5395	900799	0.99920
081	104605	5329		104605	5329	895393	919
082	109934	5264		109934	5264	890066	918
083	115198	5201		115198	5201	884802	917
084	120399	5140		120399	5140	879601	916
085	125539	5079		125539	5080	874461	915
086	130618	5020		130619	5020	869381	914
087	135639	4963		135639	4964	864361	913
088	140602	4908		140603	4907	859397	912
089	145510	4852		145510	4853	854490	911
0.00090	150362	4799		150363	4799	849637	0.99910
091	155161	4747		155162	4746	844838	909
092	159908	4695		159908	4695	840092	908
093	164603	4645		164603	4645	835397	907
094	169248	4596		169248	4596	830752	906
095	173843	4548		173844	4547	826156	905
096	178391	4500		178391	4501	821609	904
097	182892	4455		182892	4454	817108	903
098	187346	4409		187346	4409	812654	902
099	191755	4365		191755	4365	808245	901
0.00100	7.196120	4365	10.000000	7.196120	4365	12.803880	0.99900
Arc.	Log. Cosin.	Df.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.999

0.001

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.00100	7.196120		10.000000	7.196120		12.803880	0.99900
101	7.200441	4321	10.000000	7.200442	4322	12.799558	899
102	04720	4279	9.999999	04720	4278	95280	898
103	08957	4237		08958	4238	91043	897
104	13153	4196		13154	4196	86846	896
105	17309	4156		17310	4156	82690	895
106	21426	4117		21426	4116	78574	894
107	25504	4078		25504	4078	74496	893
108	29543	4039		29544	4040	70456	892
109	33546	4003		33547	4003	66453	891
0.00110	37512	3966		37513	3966	62487	0.99890
111	41443	3931		41443	3930	58557	889
112	45338	3895		45338	3895	54662	888
113	49198	3860		49199	3861	50801	887
114	53025	3827		53025	3826	46975	886
115	56818	3793		56818	3793	43182	885
116	60578	3760		60578	3760	39422	884
117	64306	3728		64306	3728	35694	883
118	68002	3696		68002	3696	31998	882
119	71667	3665		71667	3665	28333	881
0.00120	75301	3634		75302	3635	24690	0.99880
121	78905	3604		78906	3604	21094	879
122	82479	3574		82480	3574	17520	878
123	86025	3546		86026	3546	13975	877
124	89541	3516		89542	3516	10458	876
125	93030	3489	9.999999	93030	3488	06970	875
126	96490	3460		96491	3461	03509	874
127	7.299923	3433		7.299924	3433	12.700076	873
128	7.303330	3407		7.303330	3406	12.696670	872
129	06709	3379		06710	3380	93290	871
0.00130	10063	3354		10064	3354	89936	0.99870
131	13391	3328		13392	3328	86608	869
132	16694	3303		16694	3302	83306	868
133	19971	3277		19972	3278	80028	867
134	23224	3253		23225	3253	76775	866
135	26453	3229		26454	3229	73546	865
136	29659	3206		29659	3205	70341	864
137	32840	3181		32841	3182	67159	863
138	35999	3159		36000	3159	64000	862
139	39134	3135		39135	3135	60865	861
0.00140	42248	3114		42249	3114	57751	0.99860
141	45339	3091		45340	3091	54660	859
142	48408	3069		48409	3069	51591	858
143	51456	3048		51457	3048	48543	857
144	54482	3026		54483	3026	45517	856
145	57488	3006		57489	3006	42511	855
146	60472	2984		60474	2985	39527	854
147	63437	2965		63438	2964	36562	853
148	66381	2944		66382	2944	33618	852
149	69306	2925		69307	2925	30693	851
0.00150	7.372211	2905	9.999999	7.372212	2905	12.627788	0.99850
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.998

0.001

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.00150	7.372211		9.999999	7.372212		12.627788	0.99850
151	75096	2885	9	75098	2886	24902	849
152	77963	2867	9	77964	2866	22036	848
153	80811	2848	9	80812	2848	19188	847
154	83640	2829	9	83641	2829	16359	846
155	86451	2811	9	86452	2811	13548	845
156	89244	2793	9	89245	2793	10755	844
157	92019	2775	9	92020	2775	07980	843
158	94777	2758	9	94778	2758	05222	842
159	7.397517	2740	9	7.397518	2740	12.602482	841
0.00160	7.400239	2722	9	7.400241	2723	12.599759	0.99840
161	02945	2706	9	02947	2706	97053	839
162	05634	2689	9	05636	2689	94364	838
163	08307	2673	9	08308	2672	91692	837
164	10963	2656	9	10965	2657	89035	836
165	13603	2640	9	13605	2640	86395	835
166	16228	2625	9	16229	2624	83771	834
167	18836	2608	9	18837	2608	81163	833
168	21429	2593	9	21430	2593	78570	832
169	24006	2577	9	24008	2578	75992	831
0.00170	26568	2562	9	26570	2562	73430	0.99830
171	29116	2548	8	29117	2547	70883	829
172	31648	2532	8	31649	2532	68351	828
173	34165	2517	8	34167	2518	65833	827
174	36669	2504	8	36670	2503	63330	826
175	39157	2488	8	39159	2489	60841	825
176	41632	2475	8	41634	2475	58366	824
177	44093	2461	8	44094	2460	55906	823
178	46539	2446	8	46541	2447	53459	822
179	48972	2433	8	48974	2433	51026	821
0.00180	51392	2420	8	51394	2420	48607	0.99820
181	53798	2408	8	53800	2406	46200	819
182	56191	2393	8	56192	2392	43808	818
183	58570	2379	8	58572	2380	41428	817
184	60937	2367	8	60939	2367	39061	816
185	63291	2354	8	63293	2354	36707	815
186	65632	2341	8	65634	2341	34366	814
187	67961	2329	8	67963	2329	32037	813
188	70277	2316	8	70279	2316	29721	812
189	72581	2304	8	72583	2304	27417	811
0.00190	74873	2292	8	74875	2292	25125	0.99810
191	77153	2280	8	77155	2280	22846	809
192	79420	2267	8	79422	2267	20578	808
193	81677	2257	8	81679	2257	18322	807
194	83921	2244	8	83923	2244	16077	806
195	86154	2233	8	86156	2233	13844	805
196	88375	2221	8	88377	2221	11623	804
197	90585	2210	8	90588	2211	09413	803
198	92784	2199	8	92787	2199	07214	802
199	94972	2188	8	94974	2187	05026	801
0.00200	7.497149	2177	9.999998	7.497151	2177	12.502849	0.99800
Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.

0.002

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.00200	7.497149	2166	9.999998	7.497151	2166	12.502849	0.99800
201	7.499315	2156	8	7.499317	2156	12.500683	799
202	7.501471	2144	8	7.501473	2144	12.498527	798
203	03615	2134	8	03617	2135	96383	797
204	05749	2124	8	05752	2123	94249	796
205	07873	2113	8	07875	2114	92125	795
206	09986	2104	8	09989	2103	90011	794
207	12090	2092	8	12092	2093	87908	793
208	14182	2083	8	14185	2083	85815	792
209	16265	2073	8	16268	2073	83732	791
0.00210	18338	2064	8	18341	2063	81659	0.99790
211	20402	2053	8	20404	2053	79596	789
212	22455	2044	8	22457	2044	77543	788
213	24499	2034	8	24501	2034	75499	787
214	26533	2025	8	26535	2025	73465	786
215	28558	2015	8	28560	2015	71440	785
216	30573	2006	8	30575	2006	69425	784
217	32579	1997	8	32581	1997	67419	783
218	34576	1987	8	34578	1988	65422	782
219	36563	1979	7	36566	1978	63434	781
0.00220	38542	1969	7	38544	1970	61456	0.99780
221	40511	1961	7	40514	1961	59486	779
222	42472	1952	7	42475	1952	57525	778
223	44424	1943	7	44427	1943	55574	777
224	46367	1935	7	46370	1934	53630	776
225	48302	1925	9.999997	48304	1926	51696	775
226	50227	1918	7	50230	1918	49770	774
227	52145	1909	7	52148	1909	47852	773
228	54054	1900	7	54057	1900	45943	772
229	55954	1893	7	55957	1893	44043	771
0.00230	57847	1884	7	57850	1884	42150	0.99770
231	59731	1876	7	59734	1876	40266	769
232	61607	1868	7	61610	1868	38390	768
233	63475	1860	7	63478	1860	36522	767
234	65335	1852	7	65338	1852	34662	766
235	67187	1844	7	67190	1844	32810	765
236	69031	1836	7	69034	1836	30966	764
237	70867	1829	7	70870	1829	29130	763
238	72696	1821	7	72699	1821	27301	762
239	74517	1813	7	74520	1813	25480	761
0.00240	76330	1806	7	76333	1806	23667	0.99760
241	78136	1798	7	78139	1798	21861	759
242	79934	1791	7	79937	1791	20063	758
243	81725	1784	7	81728	1784	18272	757
244	83509	1776	7	83512	1776	16488	756
245	85285	1769	7	85288	1769	14712	755
246	87054	1762	7	87057	1762	12943	754
247	88816	1755	7	88819	1755	11181	753
248	90571	1747	7	90574	1747	9426	752
249	92318	1741	9.999997	92321	1741	7679	751
0.00250	7.594059	9.999997	7.594062	12.405938	0.99750		
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.997.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.00250	7.594059	1734	9.999997	7.594062	1734	12.405938	0.99750
251	95793	1726	7	95796	1727	04204	749
252	97519	1720	7	97523	1720	02477	748
253	7.599239	1713	7	7.599243	1713	12.400757	747
254	7.600952	1707	7	7.600956	1706	12.399044	746
255	02659	1700	7	02662	1700	97338	745
256	04359	1693	7	04362	1693	95638	744
257	06052	1686	7	06055	1687	93945	743
258	07738	1680	6	07742	1680	92258	742
259	09418	1674	6	09422	1674	90578	741
0.00260	11092	1667	6	11096	1667	88904	0.99740
261	12759	1661	6	12763	1661	87237	739
262	14420	1654	6	14424	1654	85576	738
263	16074	1649	6	16078	1648	83922	737
264	17723	1642	6	17726	1642	82274	736
265	19365	1635	6	19368	1636	80632	735
266	21000	1630	6	21004	1630	78996	734
267	22630	1623	6	22634	1623	77366	733
268	24253	1618	6	24257	1618	75743	732
269	25871	1611	6	25875	1611	74125	731
0.00270	27482	1606	6	27486	1606	72514	0.99730
*271	29088	1600	6	29092	1599	70908	729
272	30688	1593	6	30691	1594	69309	728
273	32281	1588	6	32285	1588	67715	727
274	33869	1582	6	33873	1582	66127	726
275	35451	1577	9.999996	35455	1577	64545	725
276	37028	1570	6	37032	1570	62968	724
277	38598	1565	6	38602	1565	61398	723
278	40163	1560	6	40167	1560	59833	722
279	41723	1554	6	41727	1554	58273	721
0.00280	43277	1548	6	43281	1548	56719	0.99720
281	44825	1543	6	44829	1543	55171	719
282	46368	1537	6	46372	1537	53628	718
283	47905	1532	6	47909	1532	52091	717
284	49437	1526	6	49441	1527	50559	716
285	50963	1521	6	50968	1521	49032	715
286	52484	1516	6	52489	1516	47511	714
287	54000	1511	6	54005	1510	45995	713
288	55511	1505	6	55515	1506	44485	712
289	57016	1500	6	57021	1500	42979	711
0.00290	58516	1495	6	58521	1495	41479	0.99710
291	60011	1490	6	60016	1490	39984	709
292	61501	1485	5	61506	1485	38494	708
293	62986	1480	5	62991	1479	37009	707
294	64466	1474	5	64470	1475	35530	706
295	65940	1470	5	65945	1470	34055	705
296	67410	1465	5	67415	1465	32585	704
297	68875	1460	5	68880	1459	31121	703
298	70335	1455	5	70339	1455	29661	702
299	71790	1450	5	71794	1450	28206	701
0.00300	7.673240	1450	9.999995	7.673244	1450	12.326756	0.99700
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.003.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.00300	7.673240	1445	9.999995	7.673244	1446	12.326756	0.99700
301	74685	1440	5	74690	1440	25310	699
302	76125	1436	5	76130	1436	23870	698
303	77561	1431	5	77566	1431	22434	697
304	78992	1426	5	78997	1426	21003	696
305	80418	1422	5	80423	1422	19577	695
306	81840	1417	5	81845	1417	18155	694
307	83257	1412	9.999995	83262	1412	16738	693
308	84669	1408	9.999995	84674	1408	15326	692
309	86077	1403	5	86082	1403	13918	691
0.00310	87480	1399	5	87485	1399	12515	0.99690
311	88879	1394	5	88884	1394	11116	689
312	90273	1390	5	90278	1390	09722	688
313	91663	1385	5	91668	1385	08332	687
314	93048	1381	5	93053	1381	06947	686
315	94429	1376	5	94434	1377	05566	685
316	95805	1372	5	95811	1372	04190	684
317	97177	1368	5	97183	1368	02817	683
318	98545	1364	5	98551	1363	01449	682
319	7.699909	1359	5	7.699914	1360	12.300086	681
0.00320	7.701268	1355	5	7.701274	1355	12.298727	0.99680
321	02623	1351	5	02629	1351	97371	679
322	03974	1347	4	03980	1346	96021	678
323	05321	1342	4	05326	1343	94674	677
324	06663	1338	4	06669	1338	93331	676
325	08001	1335	9.999994	08007	1334	91993	675
326	09336	1330	4	09341	1330	90659	674
327	10666	1326	4	10671	1327	89329	673
328	11992	1322	4	11998	1322	88002	672
329	13314	1318	4	13320	1318	86680	671
0.00330	14632	1314	4	14638	1314	85362	0.99670
331	15946	1310	4	15952	1310	84048	669
332	17256	1306	4	17262	1306	82738	668
333	18562	1302	4	18568	1302	81432	667
334	19864	1299	4	19870	1299	80130	666
335	21163	1294	4	21169	1294	78831	665
336	22457	1291	4	22463	1291	77537	664
337	23748	1287	4	23754	1287	76246	663
338	25035	1283	4	25041	1283	74959	662
339	26318	1279	4	26324	1279	73676	661
0.00340	27597	1275	4	27603	1275	72397	0.99660
341	28872	1272	4	28878	1272	71122	659
342	30144	1268	4	30150	1268	69850	658
343	31412	1264	4	31418	1265	68582	657
344	32676	1261	4	32683	1260	67318	656
345	33937	1257	4	33943	1257	66057	655
346	35194	1253	4	35200	1254	64800	654
347	36447	1250	4	36454	1249	63546	653
348	37697	1246	4	37703	1247	62297	652
349	38943	1243	9.999993	38950	1242	61050	651
0.00350	7.740186	1239	9.999993	7.740192	1239	12.259808	0.99650
Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.

0.996.

0.003.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.00350	7.740186	1239	9.999993	7.740192	1239	12.259808	0.99650
351	1425	1235	3	1431	1236	8569	649
352	2660	1232	3	2667	1232	7333	648
353	3892	1229	3	3899	1229	6101	647
354	5121	1225	3	5128	1225	4872	646
355	6346	1222	3	6353	1221	3647	645
356	7568	1218	3	7574	1219	2426	644
357	7.748786	1215	3	7.748793	1215	12.251207	643
358	7.750001	1211	3	7.750008	1211	12.249093	642
359	1212	1208	3	1219	1208	8781	641
0.00360	2426	1205	3	2427	1205	7573	0.99640
361	3625	1201	3	3632	1201	6368	639
362	4826	1198	3	4833	1198	5167	638
363	6024	1195	3	6031	1195	3969	637
364	7219	1191	3	7226	1192	2774	636
365	8410	1189	3	8418	1188	1583	635
366	7.759599	1185	3	7.759606	1185	12.240394	634
367	7.760784	1181	3	7.760791	1182	12.239209	633
368	1965	1179	3	1973	1178	8028	632
369	3144	1175	3	3151	1176	6849	631
0.00370	4319	1172	3	4327	1173	5674	0.99630
371	5491	1169	3	5498	1169	4501	629
372	6660	1166	3	6668	1166	3332	628
373	7826	1163	3	7834	1163	2166	627
374	7.768989	1160	3	7.768997	1159	12.231004	626
375	7.770149	1156	9.999993	7.770156	1157	12.229844	625
376	1305	1154	2	1313	1153	8687	624
377	2459	1150	2	2466	1151	7534	623
378	3609	1148	2	3617	1147	6383	622
379	4757	1144	2	4764	1145	5236	621
0.00380	5901	1141	2	5909	1141	4091	0.99620
381	7042	1139	2	7050	1139	2950	619
382	8181	1135	2	8189	1135	1812	618
383	7.779316	1133	2	7.779324	1132	12.220676	617
384	7.780449	1129	2	7.780456	1130	12.219544	616
385	1578	1127	2	1586	1127	8414	615
386	2705	1123	2	2713	1123	7288	614
387	3828	1121	2	3836	1121	6164	613
388	4949	1118	2	4957	1118	5043	612
389	6067	1115	2	6075	1115	3925	611
0.00390	7182	1112	2	7190	1112	2810	0.99610
391	8294	1109	2	8302	1109	1698	609
392	7.789403	1107	2	7.789411	1107	12.210889	608
393	7.790510	1103	2	7.790518	1104	12.209482	607
394	1613	1101	2	1622	1101	8378	606
395	2714	1098	2	2723	1098	7278	605
396	3812	1096	2	3821	1095	6179	604
397	4908	1092	2	4916	1093	5084	603
398	6000	1090	2	6009	1090	3991	602
399	7090	1087	2	7099	1087	2902	601
0.00400	7.798177	9.999991	7.798186			12.201814	0.99600
Arc.	Log. Cos.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.996.

0.004.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.00400	7.798177	1084	9.999991	7.798186	1084	12.201814	0.99600
401	7.799261	1082	1	7.799270	1082	12.200730	599
402	7.800343	1079	1	7.800352	1079	12.199648	598
403	1422	1076	1	1431	1076	8569	597
404	2498	1074	1	2507	1074	7493	596
405	3572	1071	1	3581	1071	6419	595
406	4643	1068	1	4652	1068	5348	594
407	5711	1066	1	5720	1066	4280	593
408	6777	1063	1	6786	1063	3214	592
409	7840	1061	1	7849	1061	2151	591
0.00410	8901	1058	1	8910	1058	1090	0.99590
411	7.809959	1055	1	7.809968	1055	12.190032	589
412	7.811014	1053	1	7.811023	1053	12.188977	588
413	2067	1050	1	2076	1050	7924	587
414	3117	1048	1	3126	1048	6874	586
415	4165	1045	1	4174	1045	5826	585
416	5210	1043	1	5219	1043	4781	584
417	6253	1040	1	6262	1040	3738	583
418	7293	1038	1	7302	1038	2698	582
419	8331	1035	1	8340	1036	1660	581
0.00420	7.819366	1033	1	7.819376	1032	12.180625	0.99580
421	7.820399	1030	1	7.820408	1031	12.179592	579
422	1429	1028	0	1439	1028	8561	578
423	2457	1026	0	2467	1025	7533	577
424	3483	1023	0	3492	1023	6508	576
425	4506	1020	0	4515	1021	5485	575
426	5526	1019	0	5536	1018	4464	574
427	6545	1015	0	6554	1016	3446	573
428	7560	1014	0	7570	1014	2430	572
429	8574	1011	0	8584	1011	1416	571
0.00430	7.829585	1009	0	7.829595	1009	12.170405	0.99570
431	7.830594	1006	0	7.830604	1006	12.169396	569
432	1609	1004	0	1610	1005	8390	568
433	2604	1002	0	2615	1001	7386	567
434	3606	1000	0	3616	1000	6384	566
435	4606	997	0	4616	997	5384	565
436	5603	995	0	5613	995	4387	564
437	6598	993	0	6608	993	3392	563
438	7591	990	0	7601	990	2399	562
439	8581	988	0	8591	989	1409	561
0.00440	7.839569	986	0	7.839580	985	12.160421	0.99560
441	7.840555	984	0	7.840565	984	12.159435	559
442	1539	981	0	1549	982	8451	558
443	2520	979	89	2531	979	7469	557
444	3499	977	89	3510	977	6490	556
445	4476	975	89	4487	975	5513	555
446	5451	973	89	5462	973	4538	554
447	6424	970	89	6435	970	3566	553
448	7394	968	89	7405	968	2598	552
449	8363	966	89	8373	967	1627	551
0.00450	7.849329	965	9.999989	7.849340	967	12.150660	0.99550
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.995

0.004

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.00450	7.849329	964	9.999989	7.849340	964	12.150660	0.99550
451	7.850263	962	9	7.850304	962	12.149696	549
452	1255	959	9	1266	959	8734	548
453	2214	958	9	2225	958	7775	547
454	3172	956	9	3183	956	6817	546
455	4128	953	9	4139	953	5861	545
456	5081	951	9	5092	951	4908	544
457	6032	950	9	6044	950	3957	543
458	6982	947	9	6993	947	3007	542
459	7929	945	9	7940	945	2060	541
0.00460	8874	943	9	8885	943	1115	0.99540
461	7.859817	941	9	7.859828	941	12.148722	539
462	7.860758	939	9	7.860770	939	12.139231	538
463	1697	937	9	1709	937	8292	537
464	2634	935	8	2646	935	7355	536
465	3569	933	8	3581	933	6419	535
466	4502	931	8	4514	931	5486	534
467	5433	929	8	5445	929	4556	533
468	6362	927	8	6374	927	3626	532
469	7289	925	8	7301	925	2699	531
0.00470	8214	923	8	8226	923	1774	0.99530
471	7.869137	921	8	7.869149	921	12.130851	529
472	7.870058	919	8	7.870070	919	12.129930	528
473	0977	917	8	0989	917	9011	527
474	1894	916	8	1906	916	8094	526
475	2810	913	9.999988	2822	913	7179	525
476	3723	911	8	3735	911	6265	524
477	4634	910	8	4646	910	5354	523
478	5544	907	8	5556	908	4444	522
479	6451	906	8	6464	905	3536	521
0.00480	7357	904	8	7369	904	2631	0.99520
481	8261	902	8	8273	902	1727	519
482	7.879163	900	8	7.879175	900	12.120825	518
483	7.880063	898	8	7.880075	899	12.119925	517
484	0961	896	7	0974	896	9026	516
485	1857	895	7	1870	895	8130	515
486	2752	893	7	2765	892	7235	514
487	3645	890	7	3657	891	6343	513
488	4535	890	7	4548	889	5452	512
489	5425	887	7	5437	888	4563	511
0.00490	6312	885	7	6325	885	3676	0.99510
491	7197	884	7	7210	884	2790	509
492	8081	882	7	8094	882	1906	508
493	8963	880	7	8976	880	1025	507
494	7.889843	878	7	7.889856	878	12.110145	506
495	7.890721	876	7	7.890734	876	12.109266	505
496	1597	875	7	1610	875	8390	504
497	2472	873	7	2485	873	7515	503
498	3345	871	7	3358	871	6642	502
499	4216	869	7	4229	870	5771	501
0.00500	7.895085	867	9.999987	7.895099	870	12.104901	0.99500
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.995.

0.005.

Are.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Are.
0.00500	7.895085		9.999987	7.895099		12.104901	0.99500
501	5953	868	7	5967	868	4033	499
502	6819	866	7	6833	866	3167	498
503	7683	864	6	7697	864	2303	497
504	8546	863	6	8550	863	1441	496
505	7.899407	861	6	7.899420	860	12.100580	495
506	7.900266	859	6	7.900280	860	12.099721	494
507	1123	857	6	1137	857	8863	493
508	1979	856	6	1993	856	8007	492
509	2833	854	6	2847	854	7153	491
0.00510	3685	852	6	3699	852	6301	0.99490
511	4536	851	6	4550	851	5450	489
512	5385	849	6	5399	849	4601	488
513	6233	848	6	6247	848	3753	487
514	7078	845	6	7092	845	2908	486
515	7922	844	6	7937	844	2063	485
516	8765	843	6	8779	842	1221	484
517	7.909606	841	6	7.909620	841	12.090380	483
518	7.910445	839	6	7.910459	839	12.089541	482
519	1282	837	6	1297	838	8703	481
0.00520	2118	836	6	2133	836	7867	0.99480
521	2953	835	6	2967	834	7033	479
522	3786	833	5	3800	833	6200	478
523	4617	831	5	4631	831	5369	477
524	5446	829	5	5461	830	4539	476
525	6274	828	5	6289	828	3711	475
526	7101	827	5	7116	827	2885	474
527	7926	825	5	7940	824	2060	473
528	8749	823	5	8764	824	1236	472
529	7.919571	822	5	7.919586	822	12.080415	471
0.00530	7.920391	820	5	7.920406	820	12.079594	0.99470
531	1209	818	5	1225	819	8776	469
532	2027	818	5	2042	817	7958	468
533	2842	815	5	2857	815	7143	467
534	3656	814	5	3671	814	6329	466
535	4469	813	5	4484	813	5516	465
536	5280	811	5	5295	811	4705	464
537	6089	809	5	6105	810	3896	463
538	6897	808	5	6913	808	3088	462
539	7704	807	4	7719	806	2281	461
0.00540	8508	804	4	8524	805	1476	0.99460
541	7.929312	804	4	7.929328	804	12.070672	459
542	7.930114	802	4	7.930130	802	12.069870	458
543	0914	800	4	0930	800	9070	457
544	1714	800	4	1729	799	8271	456
545	2511	797	4	2527	798	7473	455
546	3307	796	4	3323	796	6677	454
547	4102	795	4	4118	795	5882	453
548	4895	793	4	4911	793	5089	452
549	5687	792	4	5703	792	4297	451
0.00550	7.936477	790	9.999984	7.936493	790	12.063507	0.99450
Are.	Log. Cos.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Are.

0.994.

0.005.

Arc.	Log. Sin.	Dif.	Log. Cosine	Log. Tang.	Dif.	Log. Cot.	Arc.
0.00550	7.936477		9.999984	7.936493		12.063507	0.99450
551	7266	789		7282	789	2718	449
552	8054	788	4	8070	788	1930	448
553	8840	786	4	8856	786	1144	447
554	7.939624	784	4	7.939641	785	12.060359	446
555	7.940407	783	4	7.940424	783	12.059576	445
		782			782		
556	1189	781	3	1206	780	8794	444
557	1970	779	3	1986	779	8014	443
558	2749	777	3	2765	778	7235	442
559	3526	776	3	3543	776	6457	441
0.00560	4302	775	3	4319	775	5681	0.99440
		774	3		774		
561	5077	772	3	5094	772	4906	439
562	5851	770	3	5868	770	4133	438
563	6623	768	3	6640	768	3360	437
564	7393	766	3	7410	766	2590	436
565	8163	763	3	8180	763	1820	435
		762			762		
566	8931	760	3	8948	760	1052	434
567	7.949697	758	3	7.949714	758	12.050286	433
568	7.950463	756	3	7.950480	756	12.049520	432
569	1226	754	3	1244	754	8756	431
0.00570	1989	752	3	2006	752	7994	0.99430
		750			750		
571	2750	748	3	2768	748	7232	429
572	3510	746	3	3528	746	6472	428
573	4269	744	2	4286	744	5714	427
574	5026	742	2	5044	742	4957	426
575	5782	740	2	5800	740	4201	425
		738			738		
576	6536	736	2	6554	736	3446	424
577	7290	734	2	7308	734	2692	423
578	8042	732	2	8060	732	1940	422
579	8793	730	2	8810	730	1190	421
0.00580	7.959542	728	2	7.959560	728	12.040440	0.99420
		726			726		
581	7.960290	724	2	7.960308	724	12.039692	419
582	1037	722	2	1055	722	8945	418
583	1782	720	2	1801	720	8199	417
584	2527	718	2	2545	718	7455	416
585	3270	716	2	3288	716	6712	415
		714			714		
586	4011	712	2	4030	712	5970	414
587	4752	710	2	4770	710	5230	413
588	5491	708	2	5510	708	4490	412
589	6229	706	1	6248	706	3752	411
0.00590	6966	704	1	6984	704	3016	0.99410
		702			702		
591	7701	700	1	7720	700	2280	409
592	8435	698	1	8454	698	1546	408
593	9168	696	1	9187	696	0813	407
594	7.969900	694	1	7.969919	694	12.030081	406
595	7.970631	692	1	7.970650	692	12.029351	405
		690			690		
596	1360	688	1	1379	688	8621	404
597	2088	686	1	2107	686	7893	403
598	2815	684	1	2834	684	7166	402
599	3540	682	1	3560	682	6431	401
0.00600	7.974265	680	1	7.974284	680	12.025716	0.99400
		678			678		
Arc.	Log. Cosine	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.994.

0.006.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.00600	7.974265	723	9.999981	7.974284	723	12.025716	0.99400
601	4988	722	1	5007	722	4993	399
602	5710	721	1	5729	721	4271	398
603	6431	719	1	6450	720	3550	397
604	7150	719	1	7170	718	2830	396
605	7869	717	0	7888	718	2112	395
606	8586	716	0	8606	716	1394	394
607	7.979302	715	0	7.979322	715	12.026678	393
608	7.980017	714	0	7.980037	713	12.019963	392
609	0731	712	0	0750	713	9250	391
0.00610	1443	711	0	1463	711	8537	0.99390
611	2154	711	0	2174	711	7826	389
612	2865	709	0	2885	709	7115	388
613	3574	708	0	3594	708	6406	387
614	4282	706	0	4302	707	5698	386
615	4988	706	0	5009	705	4992	385
616	5694	704	0	5714	705	4286	384
617	6398	704	0	6419	703	3581	383
618	7102	702	0	7122	702	2878	382
619	7804	701	80	7824	701	2176	381
0.00620	8505	700	79	8525	700	1475	0.99380
621	9205	698	9	9225	699	0775	379
622	7.989903	698	9	7.989924	698	12.010076	378
623	7.990601	697	9	7.990622	696	12.009378	377
624	1298	695	9	1318	696	8682	376
625	1993	694	9.999979	2014	694	7986	375
626	2687	693	9	2708	694	7292	374
627	3380	693	9	3402	692	6599	373
628	4073	691	9	4094	692	5906	372
629	4764	689	9	4785	691	5215	371
0.00630	5453	689	9	5475	690	4525	0.99370
631	6142	688	9	6164	687	3837	369
632	6830	686	9	6851	687	3149	368
633	7516	686	9	7538	686	2462	367
634	8202	684	9	8224	684	1777	366
635	8886	684	8	8908	683	1092	365
636	7.999570	682	8	7.999591	683	12.000409	364
637	8.000252	681	8	8.000274	681	11.999726	363
638	0933	680	8	0955	680	9045	362
639	1613	680	8	1635	680	8365	361
0.00640	2293	678	8	2315	678	7686	0.99360
641	2971	677	8	2993	677	7007	359
642	3648	676	8	3670	676	6330	358
643	4324	674	8	4346	675	5654	357
644	4998	674	8	5021	674	4979	356
645	5672	673	8	5695	672	4306	355
646	6345	672	8	6367	672	3633	354
647	7017	670	8	7039	671	2961	353
648	7687	670	8	7710	670	2290	352
649	8357	669	7	8380	668	1620	351
0.00650	8.009026	669	9.999977	8.009048	668	11.999952	0.99350
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.993.

0.006.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.00650	8.009026	667	9.999977	8.009048	668	11.990952	0.99350
651	8.009693	667	7	8.009716	667	11.990284	349
652	8.010360	665	7	8.010383	665	11.989617	348
653	1025	665	7	1048	665	8952	347
654	1690	664	7	1713	663	8287	346
655	2354	662	7	2377	662	7624	345
656	3016	662	7	3039	662	6961	344
657	3678	660	7	3701	660	6299	343
658	4338	660	7	4361	660	5639	342
659	4998	658	7	5021	658	4979	341
0.00660	5656	658	7	5679	658	4321	0.99340
661	6314	656	7	6337	657	3663	339
662	6970	656	7	6994	655	3007	338
663	7626	654	6	7649	655	2351	337
664	8280	654	6	8304	653	1696	336
665	8934	652	6	8957	653	1043	335
666	8.019586	652	6	8.019610	652	11.980390	334
667	8.020238	650	6	8.020262	650	11.979738	333
668	0898	650	6	0912	650	9088	332
669	1538	649	6	1562	649	8438	331
0.00670	2187	647	6	2211	648	7789	0.99330
671	2834	647	6	2859	646	7142	329
672	3481	646	6	3505	646	6495	328
673	4127	645	6	4151	645	5849	327
674	4772	644	6	4796	644	5204	326
675	5416	642	9.999976	5440	643	4560	325
676	6058	642	6	6083	642	3917	324
677	6700	641	5	6725	641	3275	323
678	7341	640	5	7366	640	2634	322
679	7981	640	5	8006	639	1994	321
0.00680	8621	638	5	8645	639	1355	0.99320
681	9259	637	5	9284	637	0716	319
682	8.029896	636	5	8.029921	636	11.970079	318
683	8.030532	636	5	8.030557	636	11.969443	317
684	1168	634	5	1193	634	8807	316
685	1802	634	5	1827	634	8173	315
686	2436	632	5	2461	633	7539	314
687	3068	632	5	3094	631	6907	313
688	3700	631	5	3725	631	6275	312
689	4331	630	5	4356	630	5644	311
0.00690	4961	628	5	4986	629	5014	0.99310
691	5589	628	4	5615	628	4385	309
692	6217	628	4	6243	627	3757	308
693	6845	626	4	6870	627	3130	307
694	7471	625	4	7497	625	2503	306
695	8096	625	4	8122	624	1878	305
696	8721	623	4	8746	624	1254	304
697	9344	623	4	9370	623	0630	303
698	8.039967	621	4	8.039993	621	11.960007	302
699	8.040588	621	4	8.040615	620	11.959386	301
0.00700	8.041209	621	9.999974	8.041235	620	11.958765	0.99300
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.993.

0.007.

Arch.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arch.
0.00700	8.041209	620	9.999974	8.041235	620	11.958765	0.99300
701	1829	619	4	1855	620	8145	299
702	2448	618	4	2475	618	7525	298
703	3066	618	4	3093	617	6907	297
704	3684	616	3	3710	617	6290	296
705	4300	616	3	4327	615	5673	295
706	4916	614	3	4942	615	5058	294
707	5530	614	3	5557	614	4443	293
708	6144	613	3	6171	613	3829	292
709	6757	612	3	6784	612	3216	291
0.00710	7369	611	3	7396	612	2604	0.99290
711	7980	611	3	8008	610	1993	289
712	8591	609	3	8618	610	1382	288
713	9200	609	3	9228	608	0772	287
714	8.049809	608	3	8.049836	608	11.950164	286
715	8.050417	607	3	8.050444	607	11.949556	285
716	1024	606	3	1051	606	8949	284
717	1630	605	2	1657	606	8343	283
718	2235	605	2	2263	604	7737	282
719	2840	603	2	2867	604	7133	281
0.00720	3443	603	2	3471	603	6529	0.99280
721	4046	602	2	4074	602	5926	279
722	4648	601	2	4676	601	5324	278
723	5249	600	2	5277	600	4723	277
724	5849	600	2	5877	600	4123	276
725	6449	598	9.999972	6477	598	3523	275
726	7047	598	2	7075	598	2925	274
727	7645	597	2	7673	597	2327	273
728	8242	596	2	8270	596	1730	272
729	8838	595	2	8866	596	1134	271
0.00730	8.059433	595	1	8.059462	594	11.940538	0.99270
731	8.060028	593	1	8.060056	594	11.939944	269
732	0621	593	1	0650	593	0350	268
733	1214	592	1	1243	592	8757	267
734	1806	592	1	1835	592	8165	266
735	2398	590	1	2427	590	7574	265
736	2988	590	1	3017	590	6983	264
737	3578	589	1	3607	589	6393	263
738	4167	588	1	4196	588	5804	262
739	4755	587	1	4784	587	5216	261
0.00740	5342	586	1	5371	587	4629	0.99260
741	5928	586	1	5958	585	4042	259
742	6514	585	1	6543	585	3457	258
743	7099	584	0	7128	585	2872	257
744	7683	583	0	7713	583	2287	256
745	8266	583	0	8296	583	1704	255
746	8849	582	0	8879	581	1121	254
747	8.069431	581	0	8.069460	582	11.930540	253
748	8.070012	580	0	8.070042	580	11.929958	252
749	0592	579	0	0622	579	0378	251
0.00750	8.071171	579	9.999970	8.071201	579	11.928799	0.99250
Arch.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arch.

0.992.

0.007.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.00750	8.071171		9.999970	8.071201		11.928799	0.99250
751	1750	579		1780	579	8220	249
752	2328	578	70	2358	578	7642	248
753	2905	577	70	2935	577	7065	247
754	3481	576	70	3512	577	6489	246
755	4057	576	70	4087	575	5913	245
		575			575		
756	4632	574	69	4662	575	5338	244
757	5206	574	69	5236	574	4764	243
758	5779	573	69	5810	574	4190	242
759	6351	572	69	6382	572	3618	241
0.00760	6923	572	69	6954	572	3046	0.99240
		571			571		
761	7494	571	9	7525	571	2475	239
762	8065	569	9	8096	569	1904	238
763	8634	569	9	8665	569	1335	237
764	9203	568	9	9234	568	0766	236
765	8.079771	567	9	8.079802	568	11.920198	235
		567			568		
766	8.080338	567	9	8.080370	566	11.919630	234
767	0905	566	9	0936	566	9064	233
768	1471	565	8	1502	566	8498	232
769	2036	564	8	2067	565	7933	231
0.00770	2600	564	8	2632	565	7368	0.99230
		564			564		
771	3164	563	8	3196	564	6805	229
772	3727	562	8	3759	563	6242	228
773	4289	561	8	4321	562	5679	227
774	4850	561	8	4882	561	5118	226
775	5411	560	9.999968	5443	561	4557	225
		559			560		
776	5971	559	8	6003	560	3997	224
777	6530	558	8	6563	560	3438	223
778	7089	558	8	7121	558	2879	222
779	7647	557	8	7679	558	2321	221
0.00780	8204	557	7	8236	557	1764	0.99220
		556			557		
781	8760	556	7	8793	555	1207	219
782	9316	555	7	9349	555	0652	218
783	8.089871	554	7	8.089904	554	11.910097	217
784	8.090425	554	7	8.090458	554	11.909542	216
785	0979	552	7	1012	553	8989	215
		553			552		
786	1531	553	7	1565	552	8436	214
787	2084	551	7	2117	551	7883	213
788	2635	551	7	2668	551	7332	212
789	3186	550	7	3219	551	6781	211
0.00790	3736	549	7	3769	550	6231	0.99210
		549			549		
791	4285	549	7	4319	549	5681	209
792	4834	548	6	4868	548	5133	208
793	5382	547	6	5416	547	4585	207
794	5929	547	6	5963	547	4037	206
795	6476	546	6	6510	547	3490	205
		545			546		
796	7022	545	6	7056	545	2944	204
797	7567	544	6	7601	545	2399	203
798	8111	544	6	8146	544	1855	202
799	8655	543	6	8699	544	1311	201
0.00800	8.099198	543	9.999966	8.099233	543	11.900767	0.99200
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.992.

0.008.

Arc.	Log. Sin.	Dif.	Log. Cos.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.00800	8.099198		9.999966	8.099233		11.900767	0.99200
801	8.099741	543		8.099775	542	11.900225	199
802	8.100285	542	6	8.100317	542	11.899683	198
803	0824	541	6	0859	542	9142	197
804	1364	540	5	1399	540	8601	196
805	1904	540	5	1939	540	8061	195
806	2443	539	5	2478	539	7522	194
807	2982	539	5	3017	539	6983	193
808	3520	538	5	3555	538	6445	192
809	4057	537	5	4092	537	5908	191
0.00810	4593	536	5	4628	536	5372	0.99190
811	5129	536	5	5164	536	4836	189
812	5664	535	5	5700	536	4301	188
813	6199	535	5	6234	534	3766	187
814	6732	533	5	6768	534	3232	186
815	7266	534	4	7301	533	2699	185
816	7798	532	4	7834	533	2166	184
817	8330	532	4	8366	532	1634	183
818	8861	531	4	8897	531	1103	182
819	9392	531	4	9438	531	0572	181
0.00820	8.109922	530	4	8.109958	530	11.890042	0.99180
821	8.110451	529	4	8.110487	529	11.889513	179
822	0980	529	4	1016	529	8984	178
823	1508	528	4	1544	528	8456	177
824	2035	527	4	2071	527	7929	176
825	2562	527	9.999964	2598	527	7402	175
826	3088	526	3	3124	526	6876	174
827	3613	525	3	3650	526	6350	173
828	4138	525	3	4175	525	5825	172
829	4662	524	3	4699	524	5301	171
0.00830	5186	524	3	5223	524	4777	0.99170
831	5709	523	3	5746	523	4254	169
832	6231	522	3	6268	522	3732	168
833	6753	522	3	6790	522	3210	167
834	7274	521	3	7311	521	2689	166
835	7794	520	3	7831	520	2169	165
836	8314	520	3	8351	520	1649	164
837	8833	519	3	8870	519	1130	163
838	9351	518	2	9389	519	0611	162
839	8.119869	518	2	8.119907	518	11.880093	161
0.00840	8.120387	518	2	8.120424	517	11.879576	0.99160
841	0903	516	2	0941	517	9059	159
842	1419	516	2	1457	516	8543	158
843	1935	516	2	1973	516	8027	157
844	2450	515	2	2488	515	7512	156
845	2964	514	2	3002	514	6998	155
846	3478	514	2	3516	514	6484	154
847	3991	513	2	4029	513	5971	153
848	4503	512	2	4541	512	5459	152
849	5015	512	1	5053	512	4947	151
0.00850	8.125526	511	9.999961	8.125565	512	11.874435	0.99150
Arc.	Log. Cos.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.091.

0,008.

Arc.	Log. Sin.	Diff.	Log. Cosin.	Log. Tang.	Diff.	Log. Cot.	Arc.
0.00850	8.125526		9.999961	8.125565		11.874435	0.99150
851	6037	511	1	6075	510	3925	149
852	6547	510	1	6585	510	3415	148
853	7056	509	1	7095	510	2905	147
854	7565	509	1	7604	509	2396	146
855	8073	508	1	8112	508	1888	145
856	8581	508	1	8620	508	1380	144
857	9088	507	1	9127	507	0873	143
858	8.129594	506	1	8.129634	507	11.870367	142
859	8.130100	506	1	8.130139	505	11.869861	141
0.00860	0605	505	0	0645	506	9355	0.99140
861	1110	505	0	1150	505	8851	139
862	1614	504	0	1654	504	8346	138
863	2117	503	0	2157	503	7843	137
864	2620	503	0	2660	503	7340	136
865	3123	503	0	3163	503	6837	135
866	3624	501	0	3665	502	6335	134
867	4126	502	0	4166	501	5834	133
868	4626	500	0	4667	501	5334	132
869	5126	500	0	5167	500	4833	131
0.00870	5626	500	9.999960	5666	499	4334	0.99130
871	6125	499	9	6165	499	3835	129
872	6623	498	9	6664	498	3337	128
873	7121	498	9	7161	498	2839	127
874	7618	497	9	7659	498	2341	126
875	8114	496	9.999959	8155	496	1845	125
876	8610	496	9	8651	496	1349	124
877	9106	495	9	9147	496	0853	123
878	8.139601	495	9	8.139642	495	11.860358	122
879	8.140095	494	9	8.140136	494	11.859864	121
0.00880	0589	494	9	0630	494	9370	0.99120
881	1082	493	8	1124	493	8877	119
882	1575	493	8	1616	493	8384	118
883	2067	492	8	2108	492	7892	117
884	2558	491	8	2600	492	7400	116
885	3049	491	8	3091	491	6909	115
886	3540	491	8	3582	491	6418	114
887	4029	489	8	4072	490	5928	113
888	4519	490	8	4561	489	5439	112
889	5008	489	8	5050	489	4950	111
0.00890	5496	488	8	5538	488	4462	0.99110
891	5985	487	8	6026	488	3974	109
892	6471	488	7	6513	487	3487	108
893	6957	486	7	7000	486	3000	107
894	7443	486	7	7486	486	2514	106
895	7929	486	7	7972	486	2029	105
896	8414	485	7	8457	485	1543	104
897	8898	484	7	8941	484	1059	103
898	9382	484	7	9425	484	0575	102
899	8.149865	483	7	8.149908	483	11.850092	101
0.00900	8.150348	483	9.999957	8.150391	483	11.849609	0.99100
Arc.	Log. Cosin.	Diff.	Log. Sin.	Log. Cot.	Diff.	Log. Tang.	Arc.

0.991.

0.009.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.00900	8.150348	482	9.999957	8.150391	483	11.849609	0.99100
901	0830	482	7	0874	482	9126	090
902	1312	481	6	1356	481	8645	098
903	1793	481	6	1837	481	8163	097
904	2274	481	6	2318	480	7683	096
905	2754	480	6	2798	479	7202	095
906	3233	480	6	3277	480	6723	094
907	3713	478	6	3757	478	6244	093
908	4191	478	6	4235	478	5765	092
909	4669	478	6	4713	478	5287	091
0.00910	5147	476	6	5191	477	4809	0.99090
911	5623	477	5	5668	476	4332	089
912	6100	476	5	6144	476	3856	088
913	6576	475	5	6620	476	3380	087
914	7051	475	5	7096	475	2904	086
915	7526	474	5	7571	474	2429	085
916	8000	474	5	8045	474	1955	084
917	8474	474	5	8519	474	1481	083
918	8948	472	5	8993	473	1007	082
919	9420	473	5	9466	472	8534	081
0.00920	8.159893	471	5	8.159938	472	11.840062	0.99080
921	8.160364	472	5	8.160410	471	11.839590	079
922	0836	470	4	0881	471	9119	078
923	1306	471	4	1352	470	8648	077
924	1777	469	4	1822	470	8178	076
925	2246	470	9.999954	2292	470	7708	075
926	2716	468	4	2762	468	7239	074
927	3184	469	4	3230	469	6770	073
928	3653	467	4	3699	467	6301	072
929	4120	467	4	4166	468	5834	071
0.00930	4587	467	4	4634	467	5366	0.99070
931	5054	466	4	5101	466	4900	069
932	5520	466	4	5567	466	4433	068
933	5986	465	3	6033	465	3967	067
934	6451	465	3	6498	465	3502	066
935	6916	464	3	6963	464	3037	065
936	7380	464	3	7427	464	2573	064
937	7844	463	3	7891	463	2109	063
938	8307	463	3	8354	463	1646	062
939	8770	462	3	8817	462	1183	061
0.00940	9232	462	3	9279	462	0721	0.99060
941	8.169694	461	3	8.169741	462	11.830259	059
942	8.170155	461	3	8.170203	460	11.829798	058
943	0616	460	2	0663	461	9337	057
944	1076	460	2	1124	460	8876	056
945	1536	459	2	1584	459	8416	055
946	1995	459	2	2043	459	7957	054
947	2454	458	2	2502	458	7498	053
948	2912	458	2	2960	458	7040	052
949	3370	457	2	3418	458	6582	051
0.00950	8.173827	457	9.999952	8.173876	458	11.826124	0.99050
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.990.

0.009.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.00950	8.173827	457	9.999952	8.173876	457	11.826124	0.99050
951	4284	457	2	4333	456	5667	0.49
952	4741	456	1	4789	456	5211	0.48
953	5197	455	1	5245	456	4755	0.47
954	5652	455	1	5701	455	4299	0.46
955	6107	454	1	6156	454	3844	0.45
956	6561	455	1	6610	455	3390	0.44
957	7016	453	1	7065	453	2936	0.43
958	7469	453	1	7518	453	2482	0.42
959	7922	453	1	7971	453	2029	0.41
0.00960	8375	453	1	8424	453	1576	0.99040
961	8827	452	1	8876	452	1124	0.39
962	9278	452	0	9328	451	0672	0.38
963	8.179730	450	0	8.179779	451	11.820221	0.37
964	8.180180	451	0	8.180230	451	11.819770	0.36
965	0631	449	0	0681	449	9320	0.35
966	1080	450	0	1130	450	8870	0.34
967	1530	449	0	1580	449	8420	0.33
968	1979	448	0	2029	448	7971	0.32
969	2427	448	0	2477	448	7523	0.31
0.00970	2875	447	0	2925	448	7075	0.99030
971	3322	447	9.999950	3373	448	6627	0.29
972	3769	447	49	3820	447	6180	0.28
973	4216	447	9	4267	447	5734	0.27
974	4662	446	9	4713	446	5287	0.26
975	8.185108	445	9.999949	8.185159	446	11.814842	0.25
976	5553	444	9	5604	445	4396	0.24
977	5997	444	9	6049	445	3952	0.23
978	6442	445	9	6493	444	3507	0.22
979	6886	444	9	6937	444	3063	0.21
0.00980	7329	443	9	7380	443	2620	0.99020
981	7772	443	8	7823	443	2177	0.19
982	8214	442	8	8266	443	1734	0.18
983	8656	442	8	8708	442	1292	0.17
984	9098	442	8	9150	442	0850	0.16
985	9539	441	8	8.189591	441	11.810409	0.15
986	8.189979	440	8	8.190032	441	11.809969	0.14
987	8.190420	439	8	0472	440	9528	0.13
988	0859	439	8	0912	440	9088	0.12
989	1299	439	8	1351	439	8649	0.11
0.00990	1738	438	8	1790	439	8210	0.99010
991	2176	438	7	2229	439	7771	0.09
992	2614	438	7	2667	438	7333	0.08
993	3052	437	7	3104	437	6896	0.07
994	3489	436	7	3542	438	6458	0.06
995	3925	437	7	3978	436	6022	0.05
996	4362	435	7	4415	437	5585	0.04
997	4797	436	7	4851	436	5150	0.03
998	5233	435	7	5286	435	4714	0.02
0.00999	5668	435	7	5721	435	4279	0.01
0.10000	8.196102	434	9.999946	8.196156	435	11.803844	0.99000
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.990.

0.010.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.01000	8.196102	434	9.999946	8.196156	434	11.803844	0.99000
001	6536	434	6	6590	434	3410	0.98990
002	6970	433	6	7024	433	2977	998
003	7403	433	6	7457	433	2543	997
004	7836	432	6	7890	432	2110	996
005	8268	432	6	8322	432	1678	995
006	8700	431	6	8754	431	1246	994
007	9131	431	6	9186	431	0814	993
008	9562	431	6	8.199617	430	11.800383	992
009	8.199993	430	6	8.200047	431	11.799953	991
0.01010	8.200423	430	5	0478	430	9522	0.98990
011	0853	429	5	0908	429	9093	989
012	1282	429	5	1337	429	8663	988
013	1711	429	5	1766	429	8234	987
014	2140	428	5	2195	428	7805	986
015	2568	427	5	2623	427	7377	985
016	2995	427	5	3051	427	6950	984
017	3422	427	5	3478	427	6522	983
018	3849	427	5	3905	426	6095	982
019	4276	426	4	4331	426	5669	981
0.01020	4702	425	4	4757	426	5243	0.98980
021	5127	425	4	5183	425	4817	979
022	5552	425	4	5608	425	4392	978
023	5977	424	4	6033	424	3967	977
024	6401	424	4	6457	424	3543	976
025	8.206825	424	9.999944	8.206881	424	11.793119	975
026	7248	424	4	7305	423	2695	974
027	7672	422	4	7728	423	2272	973
028	8094	422	3	8151	422	1849	972
029	8516	422	3	8573	422	1427	971
0.01030	8938	422	3	8995	422	1005	0.98970
031	9360	421	3	9417	421	0584	969
032	8.209781	420	3	8.209838	420	11.790162	968
033	8.210201	420	3	8.210258	421	11.789742	967
034	0621	420	3	0679	420	9321	966
035	1041	420	3	1099	419	8902	965
036	1461	418	2	1518	419	8482	964
037	1879	419	2	1937	419	8063	963
038	2298	418	2	2356	418	7644	962
039	2716	418	2	2774	418	7226	961
0.01040	3134	417	2	3192	417	6808	0.98960
041	3551	417	2	3609	417	6391	959
042	3968	417	2	4026	417	5974	958
043	4385	416	2	4443	416	5557	957
044	4801	416	2	4859	416	5141	956
045	5217	415	2	5275	416	4725	955
046	5632	415	1	5691	415	4309	954
047	6047	415	1	6106	414	3894	953
048	6462	414	1	6520	415	3480	952
049	6876	414	1	6935	414	3065	951
0.01050	8.217290	414	9.999941	8.217349	414	11.782651	0.98950
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.010.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.01050	8.217290	413	9.999941	8.217349	413	11.782651	0.98950
051	7703	413	1	7762	413	2238	949
052	8116	413	1	8175	413	1825	948
053	8528	412	1	8588	413	1412	947
054	8941	413	1	9000	412	1000	946
055	9353	412	0	9412	412	6588	945
056	8.219764	411	0	8.219824	412	11.780176	944
057	8.220175	411	0	8.220235	411	11.779765	943
058	0586	411	0	0646	411	9355	942
059	0996	410	0	1056	410	8944	941
0.01060	1406	410	0	1466	410	8534	0.98940
061	1815	409	40	1876	410	8125	939
062	2224	409	40	2285	409	7715	938
063	2633	409	9.999940	2694	409	7307	937
064	3041	408	39	3102	408	6898	936
065	3449	408	9	3510	408	6490	935
066	3857	408	9	3918	408	6082	934
067	4264	407	9	4325	407	5675	933
068	4671	407	9	4732	407	5268	932
069	5077	406	9	5138	406	4862	931
0.01070	5483	406	9	5545	407	4455	0.98930
071	5889	405	9	5950	405	4050	929
072	6294	405	8	6356	406	3644	928
073	6699	405	8	6761	405	3239	927
074	7104	405	8	7165	404	2835	926
075	8.227508	404	9.999938	8.227570	405	11.772430	925
076	7912	404	8	7974	404	2027	924
077	8315	403	8	8377	403	1623	923
078	8718	403	8	8780	403	1220	922
079	9121	403	8	9183	403	0817	921
0.01080	9523	402	8	9585	402	0415	0.98920
081	8.229925	402	7	8.229987	402	11.770013	919
082	8.230326	401	7	8.230389	402	11.769611	918
083	0727	401	7	0790	401	9210	917
084	1128	401	7	1191	401	8809	916
085	1529	401	7	1592	401	8408	915
086	1929	400	7	1992	400	8008	914
087	2328	399	7	2392	400	7608	913
088	2728	400	7	2791	399	7209	912
089	3127	399	7	3190	399	6810	911
0.01090	3525	398	6	3589	399	6411	0.98910
091	3923	398	6	3987	398	6013	909
092	4321	398	6	4385	398	5615	908
093	4719	397	6	4783	398	5217	907
094	5116	397	6	5180	397	4820	906
095	5513	397	6	5577	397	4423	905
096	5909	396	6	5973	396	4027	904
097	6305	396	6	6370	397	3631	903
098	6701	395	5	6765	395	3235	902
099	7096	395	5	7161	396	2839	901
0.01100	8.237491	395	9.999935	8.237556	395	11.762444	0.98900
Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.

0.989.

0.011.

Arc.	Log. Sin.	Diff.	Log. Cosin.	Log. Tang.	Diff.	Log. Cot.	Arc.
0.01100	8.237491	395	9.999935	8.237556	395	11.762444	0.98900
101	7886	394	5	7951	394	2050	896
102	8280	394	5	8345	394	1655	898
103	8674	393	5	8739	394	1261	897
104	9067	393	5	9133	393	0868	896
105	9460	393	5	9526	393	0474	895
106	8.239853	393	5	8.239919	393	11.760081	894
107	8.240246	392	4	8.240311	392	11.759689	893
108	0638	392	4	0704	393	9297	892
109	1030	391	4	1095	391	8905	891
0.01110	1421	391	4	1487	392	8513	0.98890
111	1812	391	4	1878	391	8122	889
112	2203	390	4	2269	391	7731	888
113	2593	390	4	2659	390	7341	887
114	2983	390	4	3049	390	6951	886
115	3373	389	3	3439	390	6561	885
116	3762	389	3	3829	389	6171	884
117	4151	388	3	4218	389	5782	883
118	4539	388	3	4606	388	5394	882
119	4928	388	3	4995	389	5005	881
0.01120	5316	387	3	5383	388	4617	0.98880
121	5703	387	3	5770	387	4230	879
122	6090	387	3	6158	388	3842	878
123	6477	387	2	6545	387	3455	877
124	6864	386	2	6931	386	3069	876
125	8.247250	386	9.999932	8.247318	387	11.752682	875
126	7636	385	2	7704	386	2296	874
127	8021	385	2	8089	385	1911	873
128	8406	385	2	8474	385	1526	872
129	8791	385	2	8859	385	1141	871
0.01130	9176	384	2	9244	385	0756	0.98870
131	9560	383	2	8.249628	384	11.750372	869
132	8.249943	384	1	8.250012	384	11.749988	868
133	8.250327	383	1	0396	383	9604	867
134	0710	383	1	0779	383	9221	866
135	1093	382	1	1162	383	8838	865
136	1475	382	1	1544	382	8456	864
137	1857	382	1	1927	383	8074	863
138	2239	381	1	2308	382	7692	862
139	2620	382	1	2690	381	7310	861
0.01140	3002	380	0	3071	381	6929	0.98860
141	3382	381	0	3452	381	6548	859
142	3763	380	0	3833	381	6167	858
143	4143	380	0	4213	380	5787	857
144	4523	380	0	4593	380	5407	856
145	4902	379	0	4972	379	5028	855
146	5281	379	0	5351	379	4649	854
147	5660	378	9.999930	5730	379	4270	853
148	6038	378	29	6109	379	3891	852
149	6416	378	9	6487	378	3513	851
0.01150	8.256794	378	9.999929	8.256865	378	11.743135	0.98850
Arc.	Log. Sin.	Diff.	Log. Cosin.	Log. Tang.	Diff.	Log. Cot.	Arc.

0.988.

0.011.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.01150	8.256794	378	9.999929	8.256865	378	11.743135	0.98850
151	7172	377	9	7243	377	2758	849
152	7549	376	9	7620	377	2380	848
153	7925	377	9	7997	377	2003	847
154	8302	376	9	8373	376	1627	846
155	8678	376	9	8750	377	1250	845
156	9054	375	8	9125	375	0875	844
157	9429	376	8	9501	376	0499	843
158	8.259805	374	8	8.259876	375	11.740124	842
159	8.260179	375	8	8.260251	375	11.739749	841
0.01160	0554	374	8	0626	374	9374	0.98840
161	0928	374	8	1000	374	9000	839
162	1302	373	8	1374	374	8626	838
163	1675	374	8	1748	374	8252	837
164	2049	373	7	2121	373	7879	836
165	2422	372	7	2494	373	7506	835
166	2794	372	7	2867	372	7133	834
167	3166	372	7	3239	373	6761	833
168	3538	372	7	3612	371	6389	832
169	3910	371	7	3983	372	6017	831
0.01170	4281	371	7	4355	371	5645	0.98830
171	4652	371	7	4726	371	5274	829
172	5023	370	6	5097	370	4903	828
173	5393	370	6	5467	370	4533	827
174	5763	370	6	5837	370	4163	826
175	8.266133	370	9.999926	8.266207	370	11.733793	825
176	6503	369	6	6577	369	3423	824
177	6872	368	6	6946	369	3054	823
178	7240	369	6	7315	368	2685	822
179	7609	368	6	7683	369	2317	821
0.01180	7977	368	5	8052	368	1948	0.98820
181	8345	367	5	8420	367	1580	819
182	8712	368	5	8787	368	1213	818
183	9080	367	5	9155	367	0845	817
184	9447	366	5	9522	366	0478	816
185	8.269813	366	5	8.269888	367	11.730112	815
186	8.270179	366	5	8.270255	366	11.729745	814
187	0545	366	5	0621	366	9379	813
188	0911	366	4	0987	365	9013	812
189	1277	365	4	1352	365	8648	811
0.01190	1642	364	4	1717	365	8283	0.98810
191	2006	365	4	2082	365	7918	809
192	2371	364	4	2447	364	7553	808
193	2735	364	4	2811	364	7189	807
194	3099	363	4	3175	364	6825	806
195	3462	364	4	3539	363	6461	805
196	3826	362	3	3902	363	6098	804
197	4188	363	3	4265	363	5735	803
198	4551	362	3	4628	362	5372	802
199	4913	362	3	4990	362	5010	801
0.01200	8.275275	362	9.999923	8.275353	363	11.724647	0.98800
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.988.

0.012.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.01200	8.275275	362	9.999923	8.275353	361	11.724647	0.98800
201	5637	362	3	5714	361	4286	799
202	5909	361	3	6076	362	3924	798
203	6360	361	3	6437	361	3563	797
204	6721	360	2	6798	361	3202	796
205	7081	360	2	7159	361	2841	795
		360			360		
206	7441	360	2	7519	360	2481	794
207	7801	360	2	7879	360	2121	793
208	8161	360	2	8239	360	1761	792
209	8520	359	2	8598	359	1402	791
0.01210	8879	359	2	8958	360	1043	0.98790
		359			358		
211	9238	358	1	9316	359	0684	789
212	9596	358	1	8.279675	359	11.720325	788
213	8.279954	358	1	8.280033	358	11.719967	787
214	8.280312	358	1	0391	358	9609	786
215	0670	357	1	0749	358	9251	785
		357			357		
216	1027	357	1	1106	357	8894	784
217	1384	357	1	1463	357	8537	783
218	1741	356	1	1820	357	8180	782
219	2097	356	0	2177	357	7823	781
0.01220	2453	356	0	2533	356	7467	0.98780
		356			356		
221	2809	355	0	2889	355	7111	779
222	3164	356	0	3244	356	6756	778
223	3520	355	0	3600	355	6400	777
224	3875	354	0	3955	355	6045	776
225	8.284229	355	0.999920	8.284310	355	11.715690	775
		354			354		
226	4584	354	9.999920	4664	354	5336	774
227	4938	353	19	5018	354	4982	773
228	5291	354	9	5372	354	4628	772
229	5645	353	9	5726	353	4274	771
0.01230	5998	353	9	6079	353	3921	0.98770
		353			353		
231	6351	353	9	6432	353	3568	769
232	6704	352	9	6785	352	3215	768
233	7056	352	9	7137	352	2863	767
234	7408	352	8	7489	352	2511	766
235	7760	351	8	7841	352	2159	765
		351			351		
236	8111	351	8	8193	351	1807	764
237	8462	351	8	8544	351	1456	763
238	8813	351	8	8895	351	1105	762
239	9164	350	8	9246	351	0754	761
0.01240	9514	350	8	9597	350	0404	0.98760
		350			350		
241	8.289864	350	8	8.289947	350	11.710053	759
242	8.290214	349	7	8.290297	349	11.709703	758
243	0563	350	7	0646	350	9354	757
244	0913	349	7	0996	349	9005	756
245	1262	348	7	1345	348	8655	755
		348			348		
246	1610	349	7	1693	349	8307	754
247	1959	348	7	2042	348	7958	753
248	2307	348	7	2390	348	7610	752
249	2655	347	6	2738	348	7262	751
0.01250	8.293002	347	9.999916	8.293086	348	11.706914	0.98750
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.012.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
01250	8.293002	347	9.999916	8.293086	347	11.706914	0.98750
251	3349	347	6	3433	347	6567	749
252	3696	347	6	3780	347	6220	748
253	4043	347	6	4127	347	5873	747
254	4389	346	6	4474	347	5526	746
255	4736	347	6	4820	346	5180	745
256	5081	345	6	5166	346	4834	744
257	5427	346	5	5512	346	4488	743
258	5772	345	5	5857	345	4143	742
259	6117	345	5	6202	345	3798	741
01260	6462	345	5	6547	345	3453	0.98740
261	6807	345	5	6892	345	3108	739
262	7151	344	5	7236	344	2764	738
263	7495	344	5	7580	344	2420	737
264	7838	343	4	7924	344	2076	736
265	8182	344	4	8268	344	1732	735
266	8525	343	4	8611	343	1389	734
267	8868	343	4	8954	343	1046	733
268	9210	342	4	9297	342	0703	732
269	9553	342	4	9639	342	0361	731
01270	8.299895	342	4	8.299981	342	11.700019	0.98730
271	8.300237	342	3	8.300323	342	11.699677	729
272	0578	341	3	0665	342	9335	728
273	0919	341	3	1006	341	8994	727
274	1260	341	3	1347	341	8653	726
275	1601	341	9.999913	1688	341	8312	725
276	1942	341	3	2029	341	7971	724
277	2282	340	3	2369	340	7631	723
278	2622	340	3	2709	340	7291	722
279	2961	339	2	3049	340	6951	721
01280	3301	340	2	3388	339	6612	0.98720
281	3640	339	2	3728	340	6272	719
282	3979	338	2	4067	339	5933	718
283	4317	338	2	4405	338	5595	717
284	4656	338	2	4744	339	5256	716
285	4994	338	2	5082	338	4918	715
286	5331	337	1	5420	338	4580	714
287	5669	338	1	5758	337	4242	713
288	6006	337	1	6095	337	3905	712
289	6343	337	1	6432	337	3568	711
01290	6680	337	1	6769	337	3231	0.98710
291	7016	336	1	7106	337	2894	709
292	7353	336	1	7442	336	2558	708
293	7689	335	0	7778	336	2222	707
294	8024	336	0	8114	336	1886	706
295	8360	336	0	8450	336	1550	705
296	8695	335	0	8785	335	1215	704
297	9030	335	0	9120	335	0880	703
298	9365	335	0	9455	335	0545	702
299	8.309699	334	9.999910	8.309789	334	11.690211	701
01300	8.310033	334	9.999909	8.310124	335	11.689876	0.98700
re.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.

0.987.

0.013.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.01300	8.310033	334	9.999909	8.310124	334	11.689876	0.98700
301	0367	334	9	0458	334	9542	699
302	0701	333	9	0791	333	9209	698
303	1034	333	9	1125	334	8875	697
304	1367	333	9	1458	333	8542	696
305	1700	333	9	1791	333	8209	695
306	2033	333	9	2124	333	7876	694
307	2365	332	9	2457	333	7544	693
308	2697	332	8	2789	332	7211	692
309	3029	332	8	3121	332	6879	691
0.01310	3361	332	8	3453	332	6548	0.98690
311	3692	331	8	3784	331	6216	689
312	4023	331	8	4115	331	5885	688
313	4354	331	8	4446	331	5554	687
314	4684	330	8	4777	331	5223	686
315	5015	331	7	5107	330	4893	685
316	5345	330	7	5438	331	4562	684
317	5675	330	7	5768	330	4232	683
318	6004	329	7	6097	329	3903	682
319	6334	330	7	6427	330	3573	681
0.01320	6663	329	7	6756	329	3244	0.98680
321	6992	329	7	7085	329	2915	679
322	7320	328	6	7414	329	2586	678
323	7649	329	6	7742	328	2258	677
324	7977	328	6	8071	329	1930	676
325	8.318304	327	9.999906	8.318399	328	11.681602	675
326	8632	328	6	8726	327	1274	674
327	8959	327	6	9054	328	0946	673
328	9287	328	6	9381	327	0619	672
329	9613	326	5	8.319708	327	11.680292	671
0.01330	8.319940	327	5	8.320035	327	11.679965	0.98670
331	8.320266	326	5	0361	326	9639	669
332	0592	326	5	0688	327	9313	668
333	0918	326	5	1014	326	8987	667
334	1244	325	5	1339	325	8661	666
335	1569	325	5	1665	326	8335	665
336	1895	326	4	1990	325	8010	664
337	2219	324	4	2315	325	7685	663
338	2544	325	4	2640	325	7360	662
339	2868	324	4	2965	325	7036	661
0.01340	3193	325	4	3289	324	6711	0.98660
341	3517	324	4	3613	324	6387	659
342	3840	323	4	3937	324	6063	658
343	4164	324	3	4260	323	5740	657
344	4487	323	3	4584	324	5416	656
345	4810	323	3	4907	323	5093	655
346	5133	323	3	5230	323	4770	654
347	5455	322	3	5552	322	4448	653
348	5777	322	3	5875	323	4125	652
349	6099	322	3	6197	322	3803	651
0.01350	8.326421	322	9.999902	8.326519	322	11.673481	0.98650
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.013.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.01350	8.326421	322	9.999902	8.326519	321	11.673481	0.98650
351	6743	321	2	6846	322	3160	649
352	7064	321	2	7162	321	2838	648
353	7385	321	2	7483	321	2517	647
354	7706	320	2	7804	321	2196	646
355	8026	321	2	8125	320	1875	645
356	8347	320	2	8445	321	1555	644
357	8667	320	1	8766	320	1235	643
358	8987	319	1	9086	320	915	642
359	9306	320	1	9406	319	595	641
0.01360	9626	319	1	8.329725	319	11.670275	640
361	8.329945	319	1	8.330044	319	11.669956	639
362	8.330264	319	1	0363	319	937	638
363	0583	318	1	0682	319	9318	637
364	0901	318	0	1001	318	8999	636
365	1219	318	0	1319	318	8681	635
366	1537	318	0	1637	318	8363	634
367	1855	318	0	1955	318	8045	633
368	2173	317	0	2273	317	7727	632
369	2490	317	9.999900	2590	318	7410	631
0.01370	2807	317	9.999999	2908	317	7093	0.98630
371	3124	316	99	3225	316	6776	629
372	3440	317	99	3541	317	6459	628
373	3757	316	99	3858	316	6142	627
374	4073	316	9.999899	4174	316	5826	626
375	8.334389	316	9.999899	8.334490	316	11.665510	625
376	4705	315	9	4806	316	5194	624
377	5020	315	8	5122	315	4878	623
378	5335	315	8	5437	315	4563	622
379	5650	315	8	5752	315	4248	621
0.01380	5965	315	8	6067	315	3933	0.98620
381	6280	314	8	6382	314	3618	619
382	6594	314	8	6696	314	3304	618
383	6908	314	8	7010	314	2990	617
384	7222	313	7	7324	314	2676	616
385	7535	314	7	7638	314	2362	615
386	7849	313	7	7952	313	2048	614
387	8162	313	7	8265	313	1735	613
388	8475	313	7	8578	313	1422	612
389	8788	312	7	8891	313	1109	611
0.01390	9100	313	7	9204	312	0796	0.98610
391	9413	312	6	9516	312	0484	609
392	8.339725	311	6	8.339828	312	11.660172	608
393	8.340036	312	6	8.340140	312	11.659860	607
394	0348	311	6	0452	312	9548	606
395	0659	312	6	0764	311	9236	605
396	0971	310	6	1075	311	8925	604
397	1281	311	5	1386	311	8614	603
398	1592	311	5	1697	311	8303	602
399	1903	310	5	2008	311	7993	601
0.01400	8.342213	310	9.999895	8.342318	310	11.657682	0.98600
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.986.

0.014.

Arc.	Log. Sin.		Log. Cosin.	Log. Tang.		Log. Cot.	Arc.
0.01400	8.342213	Dif.	9.999895	8.342318	Dif.	11.657682	0.986000
401	2523	310	5	2628	310	7372	599
402	2833	310	5	2938	310	7062	598
403	3142	309	5	3248	310	6752	597
404	3452	310	4	3557	309	6443	596
405	3761	309	4	3867	310	6133	595
406	4070	309	4	4176	309	5824	594
407	4379	309	4	4485	309	5515	593
408	4687	308	4	4793	308	5207	592
409	4995	308	4	5102	309	4898	591
0.01410	5304	309	4	5410	308	4590	0.98590
411	5611	307	3	5718	308	4282	589
412	5919	308	3	6026	308	3974	588
413	6226	307	3	6333	307	3667	587
414	6534	308	3	6641	308	3359	586
415	6841	307	3	6948	307	3052	585
416	7147	306	3	7255	307	2745	584
417	7454	307	2	7562	307	2439	583
418	7760	306	2	7868	306	2132	582
419	8066	306	2	8174	306	1826	581
0.01420	8372	306	2	8480	306	1520	0.98580
421	8678	306	2	8786	306	1214	579
422	8983	305	2	9092	306	0908	578
423	9289	306	2	9397	305	0603	577
424	9594	305	1	8.349702	305	11.650298	576
425	8.346899	305	9.999891	8.350007	305	11.649993	575
426	8.350203	304	1	0312	305	9688	574
427	0508	305	1	0617	305	9383	573
428	0812	304	1	0921	304	9079	572
429	1116	304	1	1225	304	8775	571
0.01430	1419	303	0	1529	304	8471	0.98570
431	1723	304	0	1833	304	8167	569
432	2026	303	0	2136	303	7864	568
433	2329	303	9.999890	2439	303	7561	567
434	2632	303	9.999890	2743	304	7258	566
435	2935	303	90	3045	302	6955	565
436	3238	303	90	3348	303	6652	564
437	3540	302	89	3650	302	6350	563
438	3842	302	89	3953	303	6047	562
439	4144	302	89	4255	302	5745	561
0.01440	4445	301	89	4556	301	5444	0.98560
441	4747	302	89	4858	302	5142	559
442	5048	301	89	5159	301	4841	558
443	5349	301	88	5461	302	4539	557
444	5650	301	88	5762	301	4238	556
445	5950	300	88	6062	300	3938	555
446	6251	301	88	6363	301	3637	554
447	6551	300	88	6663	300	3337	553
448	6851	300	88	6963	300	3037	552
449	7151	300	88	7263	300	2737	551
0.01450	8.357450	299	9.999887	8.357563	300	11.642437	0.98550

Arc. Log. Cosin. Dif. Log. Sin. Log. Cot. Dif. Log. Tang. Arc.

0.985.

0.014.

Arc.	Log. Sin.		Log. Cosin.	Log. Tang.		Log. Cot.	Arc.
0.01450	8.357450	Dif.	9.999887	8.357563	Dif.	11.642437	0.98550
451	7750	300	7	7863	300	2138	549
452	8049	299	7	8162	299	1838	548
453	8348	299	7	8461	299	1539	547
454	8647	299	7	8760	299	1240	546
455	8945	298	7	9059	299	0942	545
456	9243	298	6	9357	298	0643	544
457	9542	299	6	9655	298	0345	543
458	8.359839	297	6	8.359953	298	11.640047	542
459	8.360137	298	6	3.360251	298	11.639749	541
0.01460	0435	298	6	0549	298	9451	0.98540
461	0732	297	6	0846	297	9154	539
462	1029	297	6	1144	298	8856	538
463	1326	297	5	1441	297	8559	537
464	1623	297	5	1738	297	8263	536
465	1919	296	5	2034	296	7966	535
466	2216	297	5	2331	297	7669	534
467	2512	296	5	2627	296	7373	533
468	2807	295	5	2923	296	7077	532
469	3103	296	4	3219	296	6781	531
0.01470	3399	296	4	3514	295	6486	0.98530
471	3694	295	4	3810	296	6190	529
472	3989	295	4	4105	295	5895	528
473	4284	295	4	4400	295	5600	527
474	4579	295	4	4695	295	5305	526
475	8.364873	294	9.999883	8.364990	295	11.635010	525
476	5167	294	3	5284	294	4716	524
477	5461	294	3	5578	294	4422	523
478	5755	294	3	5872	294	4128	522
479	6049	294	3	6166	294	3834	521
0.01480	6343	294	3	6460	294	3540	0.98520
481	6636	293	3	6753	293	3247	519
482	6929	293	2	7047	294	2954	518
483	7222	293	2	7340	293	2660	517
484	7514	292	2	7633	293	2368	516
485	7807	293	2	7925	292	2075	515
486	8099	293	2	8218	293	1782	514
487	8391	292	2	8510	292	1490	513
488	8683	292	1	8802	292	1198	512
489	8975	292	1	9094	292	0906	511
0.01490	9267	292	1	9386	292	0615	0.98510
491	9558	291	1	9677	291	0323	509
492	8.369849	291	1	8.369968	291	11.630032	508
493	8.370140	291	1	8.370259	291	11.629741	507
494	0431	290	0	0550	291	9450	506
495	0721	290	0	0841	291	9159	505
496	1012	290	9.999880	1131	290	8869	504
497	1302	290	9.999880	1422	291	8578	503
498	1592	289	0	1712	290	8288	502
499	1881	289	80	2002	290	7998	501
0.01500	8.372171	290	9.999879	8.372292	290	11.627709	0.98500
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.985.

0.015.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.01500	8.372171	289	9.999879	8.372292	289	11.627709	0.98500
501	2460	290	9	2581	289	7419	499
502	2750	289	9	2870	289	7130	498
503	3039	288	9	3160	290	6840	497
504	3327	288	9	3449	289	6552	496
505	3616	289	9	3737	288	6263	495
506	3904	288	9	4026	289	5974	494
507	4193	289	8	4314	288	5686	493
508	4481	288	8	4603	289	5398	492
509	4768	287	8	4891	288	5110	491
0.01510	5056	288	8	5178	287	4822	0.98490
511	5344	288	8	5466	288	4534	480
512	5631	287	8	5753	287	4247	488
513	5918	287	7	6041	288	3959	487
514	6205	287	7	6328	287	3672	486
515	6492	287	7	6615	287	3386	485
516	6778	286	7	6901	286	3099	484
517	7064	286	7	7188	287	2812	483
518	7351	287	7	7474	286	2526	482
519	7636	285	6	7760	286	2240	481
0.01520	7922	286	6	8046	286	1954	0.98480
521	8208	286	6	8332	286	1668	479
522	8493	285	6	8617	285	1383	478
523	8778	285	6	8903	286	1097	477
524	9063	285	6	9188	285	0812	476
525	9348	285	9.999875	9473	285	0527	475
526	9633	285	5	8.370758	285	11.620242	474
527	8.379917	284	5	8.380042	284	11.619958	473
528	8.380202	285	5	0327	285	9673	472
529	0486	284	5	0611	284	9389	471
0.01530	0770	284	5	0895	284	9105	0.98470
531	1053	283	4	1179	284	8821	469
532	1337	284	4	1463	284	8538	468
533	1620	283	4	1746	283	8254	467
534	1903	283	4	2029	283	7971	466
535	2186	283	4	2312	283	7688	465
536	2469	283	4	2595	283	7405	464
537	2752	282	3	2878	283	7122	463
538	3034	282	3	3161	283	6839	462
539	3316	282	3	3443	282	6557	461
0.01540	3598	282	3	3725	282	6275	0.98460
541	3880	282	3	4007	282	5993	459
542	4162	281	3	4289	282	5711	458
543	4443	282	2	4571	282	5429	457
544	4725	282	2	4852	281	5148	456
545	5006	281	2	5134	282	4866	455
546	5287	281	2	5415	281	4585	454
547	5567	280	2	5696	281	4304	453
548	5848	281	2	5976	280	4024	452
549	6128	280	1	6257	281	3743	451
0.01550	8.386409	281	9.999871	8.386537	280	11.613463	0.98450
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.984.

0.015.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.01550	8.386409	280	9.999871	8.386537	281	11.613463	0.98450
551	6689	280	1	6818	280	3182	449
552	6969	279	1	7098	280	2902	448
553	7248	280	1	7378	280	2623	447
554	7528	279	1	7657	279	2343	446
555	7807	279	0	7937	280	2063	445
556	8086	279	0	8216	279	1784	444
557	8365	279	9.999870	8495	279	1505	443
558	8644	279	9.999870	8774	279	1226	442
559	8923	278	0	9053	279	0947	441
0.01560	9201	278	0	9331	278	0669	0.98440
561	9479	278	69	9610	279	0390	439
562	8.389757	278	69	8.389888	278	11.610112	438
563	8.390035	278	69	8.390166	278	11.609834	437
564	0313	278	69	0444	278	9556	436
565	0591	277	69	0722	278	9278	435
566	0868	277	69	0999	277	9001	434
567	1145	277	68	1277	278	8723	433
568	1422	277	68	1554	277	8446	432
569	1699	277	68	1831	277	8169	431
0.01570	1976	276	68	2108	277	7892	0.98430
571	2252	276	68	2384	276	7616	429
572	2528	276	68	2661	277	7339	428
573	2804	276	67	2937	276	7063	427
574	3080	276	67	3213	276	6787	426
575	8.393356	276	9.999967	8.393489	276	11.606511	425
576	3632	275	7	3765	276	6235	424
577	3907	275	7	4040	275	5960	423
578	4182	275	7	4316	276	5684	422
579	4457	275	6	4591	275	5409	421
0.01580	4732	275	6	4866	275	5134	0.98420
581	5007	275	6	5141	275	4859	419
582	5282	274	6	5416	275	4584	418
583	5556	274	6	5690	274	4310	417
584	5830	274	6	5965	275	4035	416
585	6104	274	5	6239	274	3761	415
586	6378	274	5	6513	274	3487	414
587	6652	274	5	6787	274	3213	413
588	6925	273	5	7061	274	2940	412
589	7199	274	5	7334	273	2666	411
0.01590	7472	273	5	7607	273	2393	0.98410
591	7745	273	4	7881	274	2120	409
592	8018	272	4	8154	273	1847	408
593	8290	272	4	8426	272	1574	407
594	8563	272	4	8699	273	1301	406
595	8835	272	4	8971	272	1029	405
596	9107	272	4	9244	273	0756	404
597	9379	272	3	9516	272	0484	403
598	9651	272	3	8.399788	272	11.600212	402
599	8.399923	272	3	8.400060	272	11.599940	401
0.01600	8.400194	271	9.999863	8.400331	271	11.599669	0.98400
Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.

0.984.

0.016.

Arc.	Log. Sin.	Dif.	Log. Cosine.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.01600	8.400194	271	9.999863	8.400331	272	11.599669	0.98400
601	0465	272	3	0603	271	9397	399
602	0737	271	3	0874	271	9126	398
603	1008	270	2	1145	271	8855	397
604	1278	271	2	1416	271	8584	396
605	1549	270	2	1687	271	8313	395
606	1819	271	2	1958	270	8042	394
607	2090	270	2	2228	270	7772	393
608	2360	270	1	2498	270	7502	392
609	2630	270	1	2768	270	7232	391
0.01610	2900	269	1	3038	270	6962	0.98390
611	3169	270	1	3308	270	6692	389
612	3439	269	1	3578	269	6422	388
613	3708	269	1	3847	270	6153	387
614	3977	269	0	4117	269	5884	386
615	4246	269	0	4386	269	5614	385
616	4515	268	9.999860	4655	268	5346	384
617	4783	269	9.999860	4923	269	5077	383
618	5052	268	60	5192	269	4808	382
619	5320	268	60	5460	268	4540	381
0.01620	5588	268	59	5729	269	4271	0.98380
621	5856	268	59	5997	268	4003	379
622	6124	267	59	6265	268	3735	378
623	6391	268	59	6533	267	3468	377
624	6659	267	59	6800	268	3200	376
625	8.406926	267	9.999859	8.407068	267	11.592932	375
626	7193	267	58	7335	267	2665	374
627	7460	267	58	7602	267	2398	373
628	7727	267	58	7869	267	2131	372
629	7994	266	58	8136	267	1864	371
0.01630	8260	266	58	8402	266	1598	0.98370
631	8526	266	58	8669	267	1331	369
632	8793	265	57	8935	266	1065	368
633	9058	266	7	9201	266	0799	367
634	9324	266	7	9467	266	0533	366
635	9590	265	7	9733	266	0267	365
636	8.409855	266	7	8.409999	265	11.590001	364
637	8.410121	265	6	8.410264	266	11.589736	363
638	0386	265	6	0530	265	9470	362
639	0651	265	6	0795	265	9205	361
0.01640	0916	264	6	1060	265	8940	0.98360
641	1180	265	6	1325	264	8675	359
642	1445	264	6	1589	265	8411	358
643	1709	264	5	1854	264	8146	357
644	1973	264	5	2118	265	7882	356
645	2237	264	5	2383	264	7618	355
646	2501	264	5	2647	263	7354	354
647	2765	264	5	2910	264	7090	353
648	3029	263	5	3174	264	6826	352
649	3293	263	4	3438	263	6562	351
0.01650	8.413555	263	9.999854	8.413701	263	11.586299	0.98350
Arc.	Log. Cosine.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.016.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.01650	8.413555	263	9.999854	8.413701	263	11.586299	0.98350
651	3818	263	4	3964	263	6036	349
652	4081	263	4	4227	263	5773	348
653	4344	263	4	4490	263	5510	347
654	4607	263	3	4753	263	5247	346
655	4869	262	3	5016	262	4984	345
656	5131	262	3	5278	263	4722	344
657	5393	262	3	5541	262	4460	343
658	5655	262	3	5803	262	4197	342
659	5917	262	3	6065	261	3935	341
0.01660	6179	262	2	6326	262	3674	0.98340
661	6440	261	2	6588	262	3412	339
662	6702	262	2	6850	261	3150	338
663	6963	261	2	7111	261	2889	337
664	7224	261	2	7372	261	2628	336
665	7485	261	2	7633	261	2367	335
666	7745	260	1	7894	261	2106	334
667	8006	261	1	8155	260	1845	333
668	8266	260	1	8415	261	1585	332
669	8527	261	1	8676	260	1324	331
0.01670	8787	260	1	8936	260	1064	0.98330
671	9047	260	0	9196	260	0804	329
672	9306	259	0	9456	260	0544	328
673	9566	260	9.999850	9716	259	0284	327
674	8.419825	259	9.999850	8.419975	260	11.580025	326
675	8.420085	260	50	8.420235	259	11.579765	325
676	0344	259	50	0494	259	9506	324
677	0603	259	49	0753	259	9247	323
678	0862	259	49	1012	259	8988	322
679	1120	258	49	1271	259	8729	321
0.01680	1379	259	49	1530	259	8470	0.98320
681	1637	258	49	1789	258	8212	319
682	1895	258	48	2047	258	7953	318
683	2153	258	48	2305	258	7695	317
684	2411	258	48	2563	258	7437	316
685	2669	258	48	2821	258	7179	315
686	2927	257	48	3079	258	6921	314
687	3184	257	48	3337	257	6663	313
688	3441	257	47	3594	257	6406	312
689	3699	258	47	3851	257	6149	311
0.01690	3956	257	47	4109	258	5891	0.98310
691	4212	256	47	4366	257	5634	309
692	4469	257	47	4623	256	5378	308
693	4726	256	46	4879	257	5121	307
694	4982	256	46	5136	256	4864	306
695	5238	256	46	5392	257	4608	305
696	5494	256	46	5649	256	4352	304
697	5750	256	46	5905	256	4095	303
698	6006	256	46	6161	255	3839	302
699	6262	255	45	6416	256	3584	301
0.01700	8.426517	255	9.999845	8.426672	256	11.573328	0.98300
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.983.

0.017.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.01700	8.426517	256	9.999845	8.426672	256	11.573328	0.98300
701	6773	255	5	6928	255	3072	299
702	7028	255	5	7183	255	2817	298
703	7283	255	5	7438	255	2562	297
704	7538	254	4	7693	255	2307	296
705	7792	255	4	7948	255	2052	295
706	8047	254	4	8203	255	1797	294
707	8301	255	4	8458	254	1543	293
708	8556	254	4	8712	254	1288	292
709	8810	254	4	8966	255	1034	291
0.01710	9064	254	3	9221	254	0780	0.98290
711	9318	253	3	9475	253	0526	289
712	9571	254	3	9728	254	0272	288
713	8.429825	253	3	8.429982	254	11.570018	287
714	8.430078	254	3	8.430236	253	11.569764	286
715	0332	253	2	0489	253	9511	285
716	0585	253	2	0742	254	9258	284
717	0838	252	2	0996	253	9005	283
718	1090	253	2	1249	252	8752	282
719	1343	253	2	1501	252	8499	281
0.01720	1596	252	2	1754	253	8246	0.98280
721	1848	252	1	2007	252	7993	279
722	2100	252	1	2259	252	7741	278
723	2352	252	1	2511	252	7489	277
724	2604	252	1	2763	252	7237	276
725	8.432856	252	1	8.433015	252	11.566985	275
726	3108	251	0	3267	252	6733	274
727	3359	251	0	3519	252	6481	273
728	3610	252	9.999840	3770	251	6230	272
729	3862	252	9.999840	4022	252	5978	271
0.01730	4113	251	40	4273	251	5727	0.98270
731	4363	250	39	4524	251	5476	269
732	4614	251	39	4775	251	5225	268
733	4865	251	39	5026	251	4974	267
734	5115	250	39	5276	250	4724	266
735	5366	251	39	5527	251	4473	265
736	5616	250	39	5777	250	4223	264
737	5866	250	38	6028	251	3973	263
738	6116	250	38	6278	250	3722	262
739	6365	249	38	6528	250	3473	261
0.01740	6615	250	38	6777	249	3223	0.98260
741	6865	250	38	7027	250	2973	259
742	7114	249	37	7276	249	2724	258
743	7363	249	37	7526	250	2474	257
744	7612	249	37	7775	249	2225	256
745	7861	249	37	8024	249	1976	255
746	8110	248	37	8273	249	1727	254
747	8358	248	37	8522	249	1478	253
748	8607	249	36	8771	249	1230	252
749	8855	248	36	9019	248	0981	251
0.01750	8.439103	248	9.999836	8.439267	248	11.560733	0.98250
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.982.

0.017.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.01750	8.439103		9.999836	8.439267		11.560733	0.98250
751	9351	248		9516	249	0484	249
752	9599	248	6	8.439764	248	11.560236	248
753	8.439847	248	5	8.440012	248	11.559988	247
754	8.440095	247	5	0259	247	9741	246
755	0342	247	5	0507	248	9493	245
756	0589	248	5	0755	248	9246	244
757	0837	247	5	1002	247	8998	243
758	1084	247	4	1249	247	8751	242
759	1331	246	4	1496	247	8504	241
0.01760	1577	247	4	1743	247	8257	0.98240
761	1824	246	4	1990	247	8010	239
762	2070	247	4	2237	246	7763	238
763	2317	246	3	2483	246	7517	237
764	2563	246	3	2730	247	7270	236
765	2809	246	3	2976	246	7024	235
766	3055	246	3	3222	246	6778	234
767	3301	245	3	3468	246	6532	233
768	3546	246	3	3714	246	6286	232
769	3792	245	2	3960	246	6041	231
0.01770	4037	245	2	4205	245	5795	0.98230
771	4282	245	2	4451	246	5550	229
772	4528	246	2	4696	245	5304	228
773	4773	245	2	4941	245	5059	227
774	5017	244	1	5186	245	4814	226
775	8.445262	245	9.999831	8.445431	245	11.554569	225
776	5507	244	1	5676	245	4325	224
777	5751	244	1	5920	244	4080	223
778	5995	244	1	6165	245	3835	222
779	6239	244	0	6409	244	3591	221
0.01780	6483	244	0	6653	244	3347	0.98220
781	6727	244	9.999830	6897	244	3103	219
782	6971	244	9.999830	7141	244	2859	218
783	7214	243	30	7385	244	2615	217
784	7458	244	30	7628	243	2372	216
785	7701	243	29	7872	244	2128	215
786	7944	243	29	8115	243	1885	214
787	8187	243	29	8359	244	1642	213
788	8430	243	29	8602	243	1398	212
789	8673	243	29	8845	243	1155	211
0.01790	8916	243	28	9087	242	0913	0.98210
791	9158	242	28	9330	243	0670	209
792	9401	243	28	9573	243	0427	208
793	9643	242	28	8.449815	242	11.550185	207
794	8.449885	242	28	8.450057	242	11.549943	206
795	8.450127	242	27	0299	242	9701	205
796	0369	242	27	0541	242	9459	204
797	0610	241	27	0783	242	9217	203
798	0852	242	27	1025	242	8975	202
799	1093	241	27	1267	242	8733	201
0.01800	8.451335	242	9.999826	8.451508	241	11.548492	0.98200
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.982.

0.018.

Arg.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arg.
0.01800	8.451335	241	9.999826	8.451508	242	11.548492	0.98200
801	1576	241	6	1750	241	8251	199
802	1817	241	6	1991	241	8009	198
803	2058	241	6	2232	241	7768	197
804	2298	241	6	2473	241	7527	196
805	2539	240	5	2714	240	7287	195
806	2779	241	5	2954	241	7046	194
807	3020	240	5	3195	240	6805	193
808	3260	240	5	3435	240	6565	192
809	3500	240	5	3675	241	6325	191
0.01810	3740	240	4	3916	240	6085	0.98190
811	3980	239	4	4156	239	5845	189
812	4219	240	4	4395	240	5605	188
813	4459	239	4	4635	240	5365	187
814	4698	240	4	4875	239	5125	186
815	4938	239	4	5114	240	4886	185
816	5177	239	3	5354	239	4647	184
817	5416	239	3	5593	239	4407	183
818	5655	239	3	5832	239	4168	182
819	5894	238	3	6071	239	3929	181
0.01820	6132	239	3	6310	238	3690	0.98180
821	6371	238	2	6548	239	3452	179
822	6609	238	2	6787	238	3213	178
823	6847	238	2	7025	239	2975	177
824	7085	238	2	7264	238	2736	176
825	8.457323	238	9.999822	8.457502	238	11.542498	175
826	7561	238	1	7740	238	2260	174
827	7799	237	1	7978	238	2022	173
828	8036	238	1	8216	237	1785	172
829	8274	237	1	8453	238	1547	171
0.01830	8511	237	1	8691	237	1309	0.98170
831	8748	237	0	8928	237	1072	169
832	8985	237	0	9165	237	0835	168
833	9222	237	9.999820	9402	237	0598	167
834	9459	237	9.999820	9639	237	0361	166
835	9696	236	20	8.459876	237	11.540124	165
836	8.459932	237	19	8.460113	237	11.539887	164
837	8.460169	236	19	0350	236	0650	163
838	0405	236	19	0586	236	0414	162
839	0641	236	19	0822	237	0178	161
0.01840	0877	236	19	1059	236	0941	0.98160
841	1113	236	18	1295	236	0705	159
842	1349	236	18	1531	236	0469	158
843	1585	235	18	1767	235	0233	157
844	1820	236	18	2002	236	7998	156
845	2056	235	18	2238	235	7762	155
846	2291	235	17	2473	236	7527	154
847	2526	235	17	2709	235	7291	153
848	2761	235	17	2944	235	7056	152
849	2996	235	17	3179	235	6821	151
0.01850	8.463231	235	9.999817	8.463414	235	11.536586	0.98150
Arg.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arg.

0.018.

0.018.

Arc.	Log. Sin.	Diff.	Log. Cosine.	Log. Tang.	Diff.	Log. Cot.	Arc.
0.01850	8.463231	234	9.999817	8.463414	235	11.536586	0.98150
851	3465	235	6	3649	234	6351	149
852	3700	234	6	3883	235	6117	148
853	3934	234	6	4118	234	5882	147
854	4168	234	6	4352	235	5648	146
855	4402	234	6	4587	234	5413	145
856	4636	234	5	4821	234	5179	144
857	4870	234	5	5055	234	4945	143
858	5104	234	5	5289	234	4711	142
859	5338	233	5	5523	234	4477	141
0.01860	5571	233	5	5756	233	4244	0.98140
861	5804	234	4	5990	233	4010	139
862	6038	233	4	6223	234	3777	138
863	6271	233	4	6457	233	3543	137
864	6504	233	4	6690	233	3310	136
865	6737	232	4	6923	233	3077	135
866	6969	233	3	7156	233	2844	134
867	7202	232	3	7389	232	2611	133
868	7434	233	3	7621	233	2379	132
869	7667	232	3	7854	232	2146	131
0.01870	7899	232	3	8086	233	1914	0.98130
871	8131	232	2	8319	232	1681	129
872	8363	232	2	8551	232	1449	128
873	8595	232	2	8783	232	1217	127
874	8827	231	2	9015	232	9985	126
875	8.469058	232	9.999812	8.469247	231	11.530753	125
876	9290	231	1	9478	232	0522	124
877	9521	232	1	9710	232	0290	123
878	9753	231	1	8.469942	231	11.530059	122
879	8.469984	231	1	8.470173	231	11.529827	121
0.01880	8.470215	231	1	0404	231	9596	0.98120
881	0446	230	0	0635	231	9365	119
882	0676	231	0	0866	231	9134	118
883	0907	230	9.999810	1097	231	8903	117
884	1137	231	9.999810	1328	230	8672	116
885	1368	230	10	1558	231	8442	115
886	1598	230	09	1789	230	8211	114
887	1828	230	09	2019	230	7981	113
888	2058	230	09	2249	230	7751	112
889	2288	230	09	2479	230	7521	111
0.01890	2518	230	09	2709	230	7291	0.98110
891	2748	229	08	2939	230	7061	109
892	2977	230	08	3169	230	6831	108
893	3207	229	08	3399	229	6602	107
894	3436	229	08	3628	229	6372	106
895	3665	229	07	3858	230	6143	105
896	3894	229	07	4087	229	5913	104
897	4123	229	07	4316	229	5684	103
898	4352	228	07	4545	229	5455	102
899	4580	229	07	4774	229	5226	101
0.01900	8.474809	229	9.999807	8.475003	229	11.524998	0.98100
Arc.	Log. Cosine.	Diff.	Log. Sin.	Log. Cot.	Diff.	Log. Tang.	Arc.

0.981.

0.019.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.01900	8.474809		9.999807	8.475003		11.524998	0.98100
901	5038	229	6	5231	228	4769	099
902	5266	228	6	5460	229	4540	098
903	5494	228	6	5688	228	4312	097
904	5722	228	6	5916	228	4084	096
905	5950	228	6	6145	229	3856	095
906	6178	228	5	6373	228	3627	094
907	6406	228	5	6601	228	3400	093
908	6633	227	5	6828	227	3172	092
909	6861	228	5	7056	228	2944	091
0.01910	7088	227	5	7284	228	2716	0.98090
911	7315	227	4	7511	227	2489	089
912	7543	228	4	7738	227	2262	088
913	7770	227	4	7966	228	2034	087
914	7996	226	4	8193	227	1807	086
915	8223	227	4	8420	227	1580	085
916	8450	227	3	8647	227	1354	084
917	8676	226	3	8873	226	1127	083
918	8903	227	3	9100	227	0900	082
919	9129	226	3	9326	226	0674	081
0.01920	9355	226	3	9553	227	0447	0.98080
921	9581	226	2	8.479779	226	11.520281	079
922	8.479807	226	2	8.480005	226	11.519995	078
923	8.480033	226	2	0231	226	9769	077
924	0259	226	2	0457	226	9543	076
925	0484	225	9.999801	0683	226	9317	075
926	0710	226	1	0909	226	9091	074
927	0935	225	1	1134	225	8866	073
928	1161	226	1	1360	226	8640	072
929	1386	225	1	1585	225	8415	071
0.01930	1611	225	0	1810	225	8190	0.98070
931	1836	225	0	2035	225	7965	069
932	2060	224	9.999800	2260	225	7740	068
933	2285	225	9.999800	2485	225	7515	067
934	2510	225	800	2710	225	7290	066
935	2734	224	9.999799	2935	225	7065	065
936	2958	224	9	3159	224	6841	064
937	3183	225	9	3384	225	6617	063
938	3407	224	9	3608	224	6392	062
939	3631	224	9	3832	224	6168	061
0.01940	3854	223	8	4056	224	5944	0.98060
941	4078	224	8	4280	224	5720	059
942	4302	224	8	4504	224	5496	058
943	4525	223	8	4728	224	5272	057
944	4749	223	8	4951	223	5049	056
945	4972	223	7	5175	224	4825	055
946	5195	223	7	5398	223	4602	054
947	5418	223	7	5621	223	4379	053
948	5641	223	7	5844	223	4156	052
949	5864	223	6	6067	223	3933	051
0.01950	8.486087	223	9.999796	8.486290	223	11.513710	0.98050
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.980.

0.010.

Arc.	Log. Sin.	Diff.	Log. Cosin.	Log. Tang.	Diff.	Log. Cot.	Arc.
0.01950	8.486087	222	9.999796	8.486290	223	11.513710	0.98050
951	6309	223	6	6513	223	3487	040
952	6532	222	6	6736	222	3264	048
953	6754	222	6	6958	223	3042	047
954	6976	222	5	7181	222	2819	046
955	7198	222	5	7403	222	2597	045
956	7420	222	5	7625	222	2375	044
957	7642	222	5	7848	223	2153	043
958	7864	222	5	8070	222	1931	042
959	8086	222	4	8291	221	1709	041
0.01960	8307	221	4	8513	222	1487	0.98040
961	8529	222	4	8735	222	1265	039
962	8750	221	4	8956	221	1044	038
963	8971	221	4	9178	222	0822	037
964	9193	222	3	9399	221	0601	036
965	9414	221	3	9620	221	0380	035
966	9634	220	3	8.489842	222	11.510159	034
967	8.489855	221	3	8.490063	221	11.509938	033
968	8.490076	221	3	0283	220	9717	032
969	0296	220	2	0504	221	9496	031
0.01970	0517	221	2	0725	221	9275	0.98030
971	0737	220	2	0945	220	9055	029
972	0957	220	2	1166	221	8834	028
973	1177	220	1	1386	220	8614	027
974	1397	220	1	1606	220	8394	026
975	8.491617	220	1	8.491826	220	11.508174	025
976	1837	220	1	2046	220	7954	024
977	2057	220	1	2266	220	7734	023
978	2276	219	0	2486	220	7514	022
979	2496	220	9.999790	2706	220	7294	021
0.01980	2715	219	9.999790	2925	219	7075	0.98020
981	2934	219	90	3145	220	6855	019
982	3153	219	90	3364	219	6636	018
983	3372	219	89	3583	219	6417	017
984	3591	219	89	3802	219	6198	016
985	3810	219	89	4021	219	5979	015
986	4029	219	89	4240	219	5760	014
987	4247	218	88	4459	219	5541	013
988	4466	219	88	4678	219	5323	012
989	4684	218	88	4896	218	5104	011
0.01990	4902	218	88	5114	218	4886	0.98010
991	5120	218	88	5333	219	4667	009
992	5338	218	87	5551	218	4449	008
993	5556	218	87	5769	218	4231	007
994	5774	218	87	5987	218	4013	006
995	5992	218	87	6205	218	3795	005
996	6209	217	87	6423	218	3577	004
997	6427	218	86	6640	217	3360	003
998	6644	217	86	6858	218	3142	002
0.01999	6861	217	86	7075	217	2925	001
0.02000	8.497078	217	9.999786	8.497293	218	11.502707	0.98000
Arc.	Log. Cosin.	Diff.	Log. Sin.	Log. Cot.	Diff.	Log Tang.	Arc.

0.980.

0.020.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.02000	8.497078	218	9.999786	8.497293	217	11.502707	0.98000
001	7296	216	5	7510	217	2490	0.97999
002	7512	217	5	7727	217	2273	998
003	7729	217	5	7944	217	2056	997
004	7946	217	5	8161	217	1839	996
005	8163	217	5	8378	217	1622	995
006	8379	216	4	8595	217	1405	994
007	8595	216	4	8811	216	1189	993
008	8812	217	4	9028	217	0972	992
009	9028	216	4	9244	216	0756	991
0.02010	9244	216	4	9460	216	0540	0.97990
011	9460	216	3	9676	216	0324	989
012	9676	216	3	8.499893	217	11.500108	988
013	8.499891	215	3	8.500108	215	11.499892	987
014	8.500107	216	3	0324	216	9676	986
015	0322	215	2	0540	216	9460	985
016	0538	216	2	0756	216	9244	984
017	0753	215	2	0971	215	9028	983
018	0968	215	2	1187	216	8814	982
019	1183	215	2	1402	215	8598	981
0.02020	1398	215	1	1617	215	8383	0.97980
021	1613	215	1	1832	215	8168	979
022	1828	215	1	2047	215	7953	978
023	2043	215	1	2262	215	7738	977
024	2257	214	1	2477	215	7523	976
025	8.502472	215	0	8.502691	214	11.497309	975
026	2686	214	9.999780	2906	215	7004	974
027	2900	214	9.999780	3120	214	6880	973
028	3114	214	80	3335	215	6665	972
029	3328	214	79	3549	214	6451	971
0.02030	3542	214	9	3763	214	6237	0.97970
031	3756	214	9	3977	214	6023	969
032	3970	214	9	4191	214	5809	968
033	4183	213	9	4405	214	5595	967
034	4397	214	8	4619	214	5381	966
035	4610	213	8	4832	213	5168	965
036	4824	214	8	5046	214	4954	964
037	5037	213	8	5259	213	4741	963
038	5250	213	7	5473	214	4528	962
039	5463	213	7	5686	213	4314	961
0.02040	5676	213	7	5899	213	4101	0.97960
041	5889	212	7	6112	213	3888	959
042	6101	213	7	6325	212	3675	958
043	6314	212	6	6537	213	3463	957
044	6526	212	6	6750	213	3250	956
045	6739	213	6	6963	213	3037	955
046	6951	212	6	7175	212	2825	954
047	7163	212	6	7387	213	2613	953
048	7375	212	5	7600	212	2400	952
049	7587	212	5	7812	212	2188	951
0.02050	8.507799	212	9.999775	8.508024	212	11.491976	0.97950
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.020.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.02050	8.507799	211	9.999775	8.508024	212	11.491976	0.97950
051	8010	212	5	8236	212	1764	949
052	8222	212	4	8448	211	1552	948
053	8434	211	4	8659	212	1341	947
054	8645	211	4	8871	212	1129	946
055	8856	212	4	9083	211	0917	945
056	9068	211	4	9294	211	0706	944
057	9279	211	3	9505	212	0495	943
058	9490	211	3	9717	212	0283	942
059	9701	210	3	8.509928	211	11.490072	941
0.02060	8.509911	211	3	8.510139	211	11.489861	0.97940
061	8.510122	211	2	0350	210	9650	939
062	0333	210	2	0560	210	9440	938
063	0543	211	2	0771	210	9229	937
064	0754	210	2	0982	210	9018	936
065	0964	210	2	1192	211	8808	935
066	1174	210	1	1403	210	8597	934
067	1384	210	1	1613	210	8387	933
068	1594	210	1	1823	210	8177	932
069	1804	210	1	2033	210	7967	931
0.02070	2014	209	0	2243	210	7757	0.97930
071	2223	210	9.999770	2453	210	7547	929
072	2433	209	9.999770	2663	210	7337	928
073	2643	210	70	2873	210	7127	927
074	2852	210	70	3082	209	6918	926
075	8.513061	209	69	8.513292	210	11.486708	925
076	3270	209	69	3501	209	6499	924
077	3479	209	69	3711	210	6290	923
078	3688	209	69	3920	209	6080	922
079	3897	209	68	4129	209	5871	921
0.02080	4106	209	8	4338	209	5662	0.97920
081	4315	209	8	4547	209	5453	919
082	4523	208	8	4756	209	5245	918
083	4732	209	8	4964	208	5036	917
084	4940	208	7	5173	209	4827	916
085	5148	208	7	5381	208	4619	915
086	5357	209	7	5590	209	4410	914
087	5565	208	7	5798	208	4202	913
088	5773	208	6	6006	208	3994	912
089	5980	207	6	6214	208	3786	911
0.02090	6188	208	6	6422	208	3578	0.97910
091	6396	208	6	6630	208	3370	909
092	6603	207	6	6838	208	3162	908
093	6811	208	5	7046	207	2954	907
094	7018	207	5	7253	208	2747	906
095	7226	208	5	7461	207	2539	905
096	7433	207	5	7668	207	2332	904
097	7640	207	4	7875	207	2125	903
098	7847	207	4	8083	208	1917	902
099	8054	207	4	8290	207	1710	901
0.02100	8.518260	206	9.999764	8.518497	207	11.481503	0.97900
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

O. 021.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.02100	8.518260	287	9.999764	8.518497	267	11.481593	0.97900
101	8467	207	3	8704	267	1296	899
102	8674	206	3	8911	267	1090	898
103	8880	207	3	9117	207	0883	897
104	9087	206	3	9324	206	0676	896
105	9293	206	3	9530	207	0470	895
106	9499	206	2	9737	206	0263	894
107	9703	206	2	8.519943	206	11.480057	893
108	8.519911	206	2	8.520149	206	11.479851	892
109	8.520117	206	2	0355	206	9645	891
0.02110	0323	206	1	0561	206	9439	0.97890
111	0529	205	1	0767	206	9233	889
112	0734	206	1	0973	206	9027	888
113	0940	205	1	1179	206	8821	887
114	1145	205	1	1385	206	8616	886
115	1350	206	0	1590	205	8410	885
116	1556	205	9.999760	1796	205	8205	884
117	1761	205	9.999760	2001	205	7999	883
118	1966	205	60	2206	205	7794	882
119	2171	205	59	2411	205	7589	881
0.02120	2376	204	59	2616	205	7384	0.97880
121	2580	205	59	2821	205	7179	879
122	2785	204	59	3026	205	6974	878
123	2989	205	58	3231	205	6769	877
124	3194	204	58	3436	205	6564	876
125	8.543398	204	9.999758	8.523640	204	11.476360	875
126	3602	205	8	3845	204	6155	874
127	3807	204	8	4049	204	5951	873
128	4011	204	7	4253	204	5747	872
129	4215	204	7	4458	205	5543	871
0.02130	4419	203	7	4662	204	5338	0.97870
131	4622	204	7	4866	204	5134	869
132	4826	204	6	5070	204	4931	868
133	5030	203	6	5273	203	4727	867
134	5233	203	6	5477	204	4523	866
135	5436	203	6	5681	204	4319	865
136	5640	203	6	5884	204	4116	864
137	5843	203	5	6088	203	3912	863
138	6046	203	5	6291	203	3709	862
139	6249	203	5	6494	203	3506	861
0.02140	6452	203	5	6697	203	3303	0.97860
141	6655	202	4	6900	203	3100	859
142	6857	203	4	7103	203	2897	858
143	7060	203	4	7306	203	2694	857
144	7263	202	4	7509	203	2491	856
145	7465	202	3	7712	203	2288	855
146	7667	203	3	7914	203	2086	854
147	7870	202	3	8117	202	1883	853
148	8072	202	3	8319	202	1681	852
149	8274	202	3	8521	203	1479	851
0.02150	8.528476	202	9.999752	8.528724	203	11.471277	0.97850
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

O. 021.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.02150	8.528476	202	9.999752	8.528724	202	11.471277	0.97850
151	8678	201	2	8926	202	1074	849
152	8879	202	2	9128	202	0872	848
153	9081	202	2	9330	202	0671	847
154	9283	201	1	9531	201	0469	846
155	9484	201	1	9733	202	0267	845
156	9686	202	1	8.529935	202	11.470065	844
157	8.529887	201	1	8.530136	201	11.469864	843
158	8.530088	201	0	0338	202	9662	842
159	0289	201	0	0539	201	9461	841
0.02160	0490	201	9.999750	0740	201	9260	0.97840
161	0691	201	9.999750	0942	202	9059	839
162	0892	201	50	1143	201	8857	838
163	1093	201	49	1344	201	8656	837
164	1294	201	9	1544	200	8456	836
165	1494	200	9	1745	201	8255	835
166	1695	201	9	1946	201	8054	834
167	1895	200	8	2147	201	7853	833
168	2095	200	8	2347	200	7653	832
169	2295	201	8	2548	201	7453	831
0.02170	2496	200	8	2748	200	7252	0.97830
171	2696	200	7	2948	200	7052	829
172	2895	200	7	3148	200	6852	828
173	3095	200	7	3348	200	6652	827
174	3295	200	7	3548	200	6452	826
175	8.533495	200	9.999747	8.533748	200	11.466252	825
176	3694	199	6	3948	200	6052	824
177	3894	200	6	4148	200	5852	823
178	4093	199	6	4347	199	5652	822
179	4292	199	6	4547	200	5453	821
0.02180	4492	200	5	4746	199	5254	0.97820
181	4691	199	5	4946	200	5055	819
182	4890	199	5	5145	199	4855	818
183	5089	199	5	5344	199	4656	817
184	5287	198	4	5543	199	4457	816
185	5486	199	4	5742	199	4258	815
186	5685	199	4	5941	199	4059	814
187	5883	198	4	6140	199	3860	813
188	6082	199	3	6338	198	3662	812
189	6280	198	3	6537	199	3463	811
0.02190	6478	198	3	6735	198	3265	0.97810
191	6677	199	3	6934	199	3066	809
192	6875	198	3	7132	198	2868	808
193	7073	198	2	7330	198	2670	807
194	7271	198	2	7529	199	2472	806
195	7468	197	2	7727	198	2274	805
196	7666	198	2	7925	198	2076	804
197	7864	198	1	8122	197	1878	803
198	8061	197	1	8320	198	1680	802
199	8259	198	1	8518	198	1482	801
0.02200	8.538456	197	9.999741	8.538716	198	11.461285	0.97800
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.978.

Arg.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arg.
0.02250	8.548212		9.999729	8.548483		11.451517	0.97750
251	8405	193	0	8676	193	1324	749
252	8508	193	8	8870	194	1131	748
253	8700	192	8	9062	192	0938	747
254	8983	193	8	9255	193	0745	746
255	9176	193	8	9448	193	0552	745
256	9368	192	7	9641	193	0359	744
257	9561	193	7	8.549833	192	11.450167	743
258	9753	192	7	8.550026	193	11.449974	742
259	8.549945	192	7	0218	192	9782	741
0.02260	8.550137	192	6	0411	193	9589	0.97740
261	0329	192	6	0603	192	9397	739
262	0521	192	6	0795	192	9205	738
263	0713	192	6	0987	192	9013	737
264	0905	192	5	1179	192	8821	736
265	1097	192	5	1371	192	8629	735
266	1288	191	5	1563	192	8437	734
267	1480	192	5	1755	192	8245	733
268	1671	191	4	1947	192	8053	732
269	1862	191	4	2138	191	7862	731
0.02270	2054	192	4	2330	192	7670	0.97730
271	2245	191	4	2521	191	7479	729
272	2436	191	3	2713	192	7287	728
273	2627	191	3	2904	191	7096	727
274	2818	191	3	3095	191	6905	726
275	8.553009	191	9.999723	8.553286	191	11.446714	725
276	3200	191	2	3477	191	6713	724
277	3390	190	2	3668	191	6521	723
278	3581	191	2	3859	191	6329	722
279	3771	190	2	4050	191	6137	721
0.02280	3962	191	1	4241	191	5945	0.97720
281	4152	190	1	4431	190	5753	719
282	4343	191	1	4622	191	5560	718
283	4533	190	1	4812	190	5368	717
284	4723	190	0	5002	190	5176	716
285	4913	190	9.999720	5193	191	4984	715
286	5103	190	9.999720	5383	190	4792	714
287	5293	190	20	5573	190	4600	713
288	5482	189	20	5763	190	4408	712
289	5672	190	9	5953	190	4216	711
0.02290	5862	190	8	6143	190	4024	0.97710
291	6051	189	9	6333	190	3832	709
292	6241	190	9	6522	189	3640	708
293	6430	189	8	6712	190	3448	707
294	6619	189	8	6901	189	3256	706
295	6809	190	8	7091	190	3064	705
296	6998	189	8	7280	189	2872	704
297	7187	189	7	7469	189	2680	703
298	7376	189	7	7659	190	2488	702
299	7564	188	7	7848	189	2296	701
0.02300	8.557753	189	9.999717	8.558037	189	11.441963	0.97700

0.022.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
1.02200	8.538456	197	9.999741	8.538716	197	11.461285	0.97800
201	8653	197	0	8913	197	1087	790
202	8851	198	9.999740	9110	197	0890	798
203	9048	197	9.999740	9308	198	0692	797
204	9245	197	40	9505	197	0495	790
205	9442	197	9	9702	197	0298	795
206	9639	197	9	8.539809	197	11.460101	794
207	8.539835	196	9	8.540096	197	11.459904	793
208	8.540032	197	9	0293	197	9707	792
209	0228	196	9	0490	197	9510	791
02210	0425	197	8	0687	197	9313	0.97790
211	0621	196	8	0883	196	9117	789
212	0818	197	8	1080	197	8920	788
213	1014	196	8	1276	196	8724	787
214	1210	196	7	1473	197	8527	786
215	1406	196	7	1669	196	8331	785
216	1602	196	7	1865	196	8135	784
217	1798	196	7	2061	196	7939	783
218	1994	196	6	2257	196	7743	782
219	2189	195	6	2453	196	7547	781
02220	2385	196	6	2649	196	7351	0.97780
221	2580	195	6	2845	196	7155	779
222	2776	196	5	3040	195	6960	778
223	2971	195	5	3236	196	6764	777
224	3166	195	5	3431	195	6569	776
225	8.543362	196	9.999735	8.543627	196	11.456373	775
226	3557	195	5	3822	195	6178	774
227	3752	195	4	4017	195	5983	773
228	3946	194	4	4212	196	5788	772
229	4141	195	4	4408	194	5593	771
12230	4336	195	4	4602	194	5398	0.97770
231	4531	194	3	4797	195	5203	769
232	4725	194	3	4992	195	5008	768
233	4920	195	3	5187	195	4813	767
234	5114	194	3	5381	194	4619	766
235	5308	194	2	5576	195	4424	765
236	5502	194	2	5770	194	4230	764
237	5697	195	2	5965	195	4035	763
238	5891	194	2	6159	194	3841	762
239	6084	193	1	6353	194	3647	761
2240	6278	194	1	6547	194	3453	0.97760
241	6472	194	1	6741	194	3259	759
242	6666	194	1	6935	194	3065	758
243	6859	193	0	7129	194	2871	757
244	7053	194	9.999730	7323	194	2677	756
245	7246	193	9.999730	7516	193	2484	755
246	7440	194	30	7710	194	2290	754
247	7633	193	9	7903	193	2097	753
248	7826	193	9	8097	194	1903	752
249	8019	193	9	8290	193	1710	751
250	8.548212	193	9.999729	8.548483	193	11.451577	0.97750
Log. Sin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Long. Tang.	Arc.	

0.977.

0.023.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.02300	8.557753	189	9.999717	8.558037	189	11.441963	0.97700
301	7942	189	6	8226	189	1774	699
302	8131	189	6	8415	189	1586	698
303	8319	188	6	8603	188	1397	697
304	8508	189	6	8792	189	1208	696
305	8696	188	5	8981	189	1019	695
306	8884	188	5	9169	188	0831	694
307	9072	188	5	9358	189	0642	693
308	9261	189	5	9546	188	0454	692
309	9449	188	4	9734	188	0266	691
0.02310	9637	188	4	8.559923	189	11.440078	0.97690
311	8.559824	187	4	8.560111	188	11.439889	689
312	8.560012	188	4	0299	188	9701	688
313	0200	188	3	0487	188	9513	687
314	0388	188	3	0675	188	9325	686
315	0575	187	3	0862	187	9138	685
316	0763	188	3	1050	188	8950	684
317	0950	187	2	1238	188	8762	683
318	1137	187	2	1425	187	8575	682
319	1325	188	2	1613	188	8387	681
0.02320	1512	187	2	1800	187	8200	0.97680
321	1699	187	1	1988	188	8013	679
322	1886	187	1	2175	187	7825	678
323	2073	187	1	2362	187	7638	677
324	2260	186	1	2549	187	7451	676
325	8.562446	187	0	8.562736	187	11.437264	675
326	2633	187	9.999710	2023	187	7077	674
327	2820	186	9.999710	3110	187	6890	673
328	3006	187	10	3297	186	6704	672
329	3193	186	9	3483	187	6517	671
0.02330	3379	186	9	3670	186	6330	0.97670
331	3565	186	9	3856	187	6144	669
332	3751	186	9	4043	186	5957	668
333	3937	186	8	4229	186	5771	667
334	4123	186	8	4415	186	5585	666
335	4309	186	8	4602	187	5398	665
336	4495	186	8	4788	186	5212	664
337	4681	186	7	4974	186	5026	663
338	4867	185	7	5160	186	4840	662
339	5052	186	7	5346	185	4654	661
0.02340	5238	185	7	5531	186	4469	0.97660
341	5423	186	6	5717	186	4283	659
342	5609	185	6	5903	185	4097	658
343	5794	185	6	6088	186	3912	657
344	5979	186	6	6274	185	3726	656
345	6165	185	5	6459	186	3541	655
346	6350	185	5	6645	185	3356	654
347	6535	185	5	6830	185	3170	653
348	6720	184	5	7015	185	2985	652
349	6904	185	4	7200	185	2800	651
0.02350	8.567089	185	9.999704	8.567385	185	11.432615	0.97650
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.976.

0.023.

Ar.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Ar.
0.02350	8.567089	185	9.999704	8.567385	185	11.432615	0.97650
351	7274	184	4	7570	185	2430	649
352	7458	185	4	7755	185	2245	648
353	7643	185	3	7940	185	2060	647
354	7827	184	3	8124	184	1876	646
355	8012	185	3	8309	185	1691	645
356	8196	184	3	8494	184	1507	644
357	8380	184	2	8678	184	1322	643
358	8564	184	2	8862	184	1138	642
359	8748	184	2	9047	185	0953	641
0.02360	8932	184	2	9231	184	0769	0.97640
361	9116	184	1	9415	184	0585	639
362	9300	184	1	9599	184	0401	638
363	9484	184	1	9783	184	0217	637
364	9668	184	1	8.569967	184	11.430033	636
365	8.569851	183	0	8.570151	184	11.429849	635
366	8.570035	184	9.999700	0335	184	9665	634
367	0218	183	9.999700	0518	183	9482	633
368	0401	184	700	0702	184	9298	632
369	0585	183	9	0886	184	9115	631
0.02370	0768	183	9	1069	183	8931	0.97630
371	0951	183	9	1252	183	8748	629
372	1134	183	9	1436	184	8564	628
373	1317	183	8	1619	183	8381	627
374	1500	183	8	1802	183	8198	626
375	8.571683	183	9.999698	8.571985	183	11.428015	625
376	1866	182	8	2168	183	7832	624
377	2048	183	7	2351	183	7649	623
378	2231	182	7	2534	183	7466	622
379	2413	183	7	2717	182	7284	621
0.02380	2596	182	6	2899	183	7101	0.97620
381	2778	182	6	3082	182	6918	619
382	2960	183	6	3264	183	6736	618
383	3143	182	6	3447	182	6553	617
384	3325	182	5	3629	183	6371	616
385	3507	182	5	3812	182	6189	615
386	3689	182	5	3994	182	6006	614
387	3871	181	5	4176	182	5824	613
388	4052	182	4	4358	182	5642	612
389	4234	182	4	4540	182	5460	611
0.02390	4416	181	4	4722	182	5278	0.97610
391	4597	182	4	4904	182	5096	609
392	4779	181	3	5086	181	4915	608
393	4960	182	3	5267	182	4733	607
394	5142	181	3	5449	181	4551	606
395	5323	181	3	5630	181	4370	605
396	5504	181	2	5812	181	4188	604
397	5685	181	2	5993	181	4007	603
398	5866	181	2	6175	181	3826	602
399	6047	181	2	6356	181	3644	601
0.02400	8.576228	181	9.999691	8.576537	181	11.423463	0.97600
Ar.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Ar.

0.976.

0.024.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.02400	8.576228	181	9.999691	8.576537	181	11.423463	0.97600
401	6409	181	1	6718	181	3282	599
402	6590	181	1	6809	181	3101	598
403	6771	181	1	7080	181	2930	597
404	6951	180	0	7261	181	2739	596
405	7132	181	9.999690	7442	181	2558	595
406	7312	180	9.999690	7622	180	2378	594
407	7493	181	90	7803	181	2197	593
408	7673	180	9	7984	181	2017	592
409	7853	180	9	8164	180	1836	591
0.02410	8033	180	9	8345	181	1656	0.97590
411	8213	180	9	8525	180	1475	589
412	8393	180	8	8705	180	1295	588
413	8573	180	8	8885	180	1115	587
414	8753	180	8	9065	180	0935	586
415	8933	180	7	9245	180	0755	585
416	9113	180	7	9425	180	0575	584
417	9292	179	7	9605	180	0395	583
418	9472	180	7	9785	180	0215	582
419	9651	179	6	8.579965	180	11.420035	581
0.02420	8.579831	180	6	8.580145	180	11.419856	0.97580
421	8.580010	179	6	0324	179	9676	579
422	0189	179	6	0504	180	9496	578
423	0368	179	5	0683	179	9317	577
424	0548	180	5	0862	179	9138	576
425	0727	179	9.999685	8.581042	180	11.418958	575
426	0906	179	5	1221	179	8779	574
427	1084	178	4	1400	179	8600	573
428	1263	179	4	1579	179	8421	572
429	1442	179	4	1758	179	8242	571
0.02430	1621	179	4	1937	179	8063	0.97570
431	1799	178	3	2116	179	7884	569
432	1978	179	3	2295	179	7705	568
433	2156	178	3	2474	179	7527	567
434	2335	179	3	2652	178	7348	566
435	2513	178	2	2831	179	7169	565
436	2691	178	2	3009	178	6991	564
437	2869	178	2	3188	179	6812	563
438	3047	178	2	3366	178	6634	562
439	3225	178	1	3544	178	6456	561
0.02440	3403	178	1	3722	178	6278	0.97560
441	3581	178	1	3901	179	6099	559
442	3759	178	0	4079	178	5921	558
443	3937	178	9.999680	4257	178	5743	557
444	4114	177	9.999680	4435	178	5566	556
445	4292	178	80	4612	177	5388	555
446	4470	178	9	4790	178	5210	554
447	4647	177	9	4968	178	5032	553
448	4824	177	9	5145	177	4855	552
449	5002	178	9	5323	178	4677	551
0.02450	8.585179	177	9.999678	8.585500	177	11.414500	0.97550
Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.

0.975.

0.024.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.02430	8.585179	177	9.999678	8.585500	178	11.414500	0.97550
451	5356	177	8	5678	178	4322	549
452	5533	177	8	5855	177	4145	548
453	5710	177	8	6032	177	3968	547
454	5887	177	7	6210	178	3790	546
455	6064	177	7	6387	177	3613	545
456	6241	177	7	6564	177	3436	544
457	6417	176	7	6741	177	3259	543
458	6594	177	6	6918	177	3082	542
459	6770	176	6	7095	177	2906	541
0.02460	6947	177	6	7271	176	2729	0.97540
461	7123	176	5	7448	177	2552	539
462	7300	177	5	7625	177	2376	538
463	7476	176	5	7801	176	2199	537
464	7652	176	5	7978	177	2023	536
465	7828	176	4	8154	176	1846	535
466	8004	176	4	8330	176	1670	534
467	8180	176	4	8507	177	1494	533
468	8356	176	4	8683	176	1317	532
469	8532	176	3	8859	176	1141	531
0.02470	8708	176	3	9035	176	0965	0.97530
471	8884	176	3	9211	176	0789	529
472	9059	175	3	9387	176	0613	528
473	9235	176	2	9563	176	0438	527
474	9410	175	2	9738	175	0262	526
475	9586	176	2	9914	176	0086	525
476	9761	175	1	8.590090	176	11.410086	524
477	8.589936	175	1	0265	175	11.409910	523
478	8.590112	176	1	0441	176	9735	522
479	0287	175	1	0616	175	9559	521
0.02480	0462	175	0	0791	175	9384	520
481	0637	175	0	0967	175	9209	0.97520
482	0812	175	9.999670	1142	176	9033	519
483	0987	175	9.999670	1317	175	8858	518
484	1161	174	70	1492	175	8683	517
485	1336	175	9	1667	175	8508	516
486	1511	175	9	1842	175	8333	515
487	1685	174	9	2017	175	8158	514
488	1860	175	8	2191	174	7983	513
489	2034	174	8	2366	175	7809	512
0.02490	2209	175	8	2541	175	7634	511
491	2383	174	8	2715	174	7459	0.97510
492	2557	174	7	2890	175	7285	509
493	2731	174	7	3064	174	7110	508
494	2905	174	7	3239	175	6936	507
495	3079	174	6	3413	174	6761	506
496	3253	174	6	3587	174	6587	505
497	3427	174	6	3761	174	6413	504
498	3601	174	6	3935	174	6239	503
499	3775	174	5	4109	174	6065	502
0.02500	8.593948	173	9.999665	8.594283	174	5891	501
						11.405717	0.97500
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.075.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.02500	8.593948	174	9.999665	8.594283	174	11.405717	0.97500
501	4122	173	5	4457	174	5543	499
502	4205	174	5	4631	174	5369	498
503	4469	173	4	4805	174	5195	497
504	4642	173	4	4978	173	5022	496
505	4816	174	4	5152	174	4848	495
506	4989	173	3	5325	173	4675	494
507	5162	173	3	5499	174	4501	493
508	5335	173	3	5672	173	4328	492
509	5508	173	3	5846	174	4155	491
0.02510	5681	173	2	6019	173	3981	0.97490
511	5854	173	2	6192	173	3808	489
512	6027	173	2	6365	173	3635	488
513	6200	172	2	6538	173	3462	487
514	6372	173	1	6711	173	3289	486
515	6545	173	1	6884	173	3116	485
516	6718	172	1	7057	173	2943	484
517	6890	172	1	7230	172	2771	483
518	7062	173	9.999660	7402	173	2598	482
519	7235	172	9.999660	7575	172	2425	481
0.02520	7407	172	60	7747	172	2253	0.97480
521	7579	172	9	7920	173	2080	479
522	7751	172	9	8092	172	1908	478
523	7923	172	9	8265	173	1735	477
524	8095	172	9	8437	172	1563	476
525	8267	172	9.999658	8.598609	172	11.401391	475
526	8439	172	8	8781	172	1219	474
527	8611	172	8	8953	172	1047	473
528	8783	172	8	9125	172	0875	472
529	8955	171	7	9297	172	0703	471
0.02530	9126	172	7	9469	172	0531	0.97470
531	9298	171	7	9641	172	0359	469
532	9469	172	6	9813	172	0187	468
533	9641	171	6	8.599984	171	11.400016	467
534	9812	171	6	8.600156	172	11.399844	466
535	8.599983	171	6	0328	172	9673	465
536	8.600154	171	5	0499	171	9501	464
537	0325	171	5	0670	172	9330	463
538	0496	171	5	0842	171	9158	462
539	0667	171	5	1013	171	8987	461
0.02540	0838	171	4	1184	171	8816	0.97460
541	1009	171	4	1355	171	8645	459
542	1180	171	4	1526	171	8474	458
543	1351	170	3	1697	171	8303	457
544	1521	171	3	1868	171	8132	456
545	1692	171	3	2039	171	7961	455
546	1863	171	3	2210	171	7790	454
547	2033	170	2	2381	171	7619	453
548	2203	170	2	2551	170	7449	452
549	2374	171	2	2722	171	7278	451
0.02550	8.602544	170	9.999652	8.602892	171	11.397108	0.97450
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.025.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.02550	8.602544	170	9.999652	8.602892	171	11.397108	0.97450
551	2714	170	1	3063	171	6937	449
552	2884	170	1	3233	170	6767	448
553	3054	170	1	3404	171	6596	447
554	3224	170	0	3574	170	6426	446
555	3394	170	9.999650	3744	170	6256	445
556	3564	170	9.999650	3914	170	6086	444
557	3734	170	50	4084	170	5916	443
558	3904	170	9	4254	170	5746	442
559	4073	169	9	4424	170	5576	441
0.02560	4243	170	9	4594	170	5406	0.97440
561	4412	169	9	4764	170	5236	439
562	4582	170	8	4934	170	5067	438
563	4751	169	8	5103	169	4897	437
564	4921	170	8	5273	170	4727	436
565	5090	169	7	5442	169	4558	435
566	5259	169	7	5612	170	4388	434
567	5428	169	7	5781	169	4219	433
568	5597	169	7	5951	170	4050	432
569	5766	169	6	6120	169	3880	431
0.02570	5935	169	6	6289	169	3711	0.97430
571	6104	169	6	6458	169	3542	429
572	6273	168	6	6627	169	3373	428
573	6441	169	5	6796	169	3204	427
574	6610	169	5	6965	169	3035	426
575	8.606779	168	9.999645	8.607134	169	11.392866	425
576	6947	169	4	7303	169	2697	424
577	7116	168	4	7472	168	2528	423
578	7284	168	4	7640	169	2360	422
579	7452	169	4	7809	168	2191	421
0.02580	7621	168	3	7977	169	2023	0.97420
581	7789	168	3	8146	168	1854	419
582	7957	168	3	8314	169	1686	418
583	8125	168	2	8483	168	1517	417
584	8293	168	2	8651	168	1349	416
585	8461	168	2	8819	168	1181	415
586	8629	168	2	8987	169	1013	414
587	8797	168	1	9156	168	0845	413
588	8965	167	1	9324	167	0677	412
589	9132	168	1	9491	168	0509	411
0.02590	9300	167	1	9659	168	0341	0.97410
591	9467	168	9.999640	9827	168	0173	409
592	9635	167	9.999640	8.609995	168	11.390005	408
593	9802	168	40	8.610163	167	11.389837	407
594	8.609970	167	9	0330	168	9670	406
595	8.610137	167	9	0498	167	9502	405
596	0304	167	9	0665	167	9335	404
597	0471	168	9	0833	168	9167	403
598	0639	167	8	1000	167	9000	402
599	0806	167	8	1168	168	8832	401
0.02600	8.610973	167	9.999638	8.611335	167	11.388665	0.97400
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.974.

0.026.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.02600	8.610973	166	9.999638	8.611335	167	11.388665	0.97400
601	1139	167	7	1502	167	8498	399
602	1306	167	7	1669	167	8331	398
603	1473	167	7	1836	167	8164	397
604	1640	167	7	2003	167	7997	396
605	1806	166	6	2170	167	7830	395
606	1973	167	6	2337	167	7663	394
607	2140	167	6	2504	167	7496	393
608	2306	166	6	2671	166	7330	392
609	2472	166	5	2837	166	7163	391
0.02610	2639	167	5	3004	167	6996	0.97390
611	2805	166	5	3170	166	6830	389
612	2971	166	4	3337	166	6663	388
613	3137	166	4	3503	167	6497	387
614	3303	166	4	3670	166	6330	386
615	3469	166	4	3836	166	6164	385
616	3635	166	3	4002	166	5998	384
617	3801	166	3	4168	166	5832	383
618	3967	166	3	4334	166	5666	382
619	4133	166	2	4501	166	5500	381
0.02620	4299	165	2	4667	165	5334	0.97380
621	4464	166	2	4832	166	5168	379
622	4630	165	2	4998	166	5002	378
623	4795	166	1	5164	166	4836	377
624	4961	165	1	5330	165	4670	376
625	8.615126	165	1	8.615495	166	11.384505	375
626	5291	166	0	5661	166	4339	374
627	5457	165	9.999630	5827	165	4173	373
628	5622	165	9.999630	5992	165	4008	372
629	5787	165	30	6157	166	3843	371
0.02630	5952	165	9	6323	165	3677	0.97370
631	6117	165	9	6488	165	3512	369
632	6282	165	9	6653	166	3347	368
633	6447	165	8	6819	165	3182	367
634	6612	165	8	6984	165	3016	366
635	6777	164	8	7149	165	2851	365
636	6941	165	8	7314	165	2686	364
637	7106	164	7	7479	164	2522	363
638	7270	165	7	7643	165	2357	362
639	7435	164	7	7808	165	2192	361
0.02640	7599	165	7	7973	165	2027	0.97360
641	7764	164	6	8138	164	1863	359
642	7928	164	6	8302	165	1698	358
643	8092	165	6	8467	164	1533	357
644	8257	164	5	8631	165	1369	356
645	8421	164	5	8796	164	1205	355
646	8585	164	5	8960	164	1040	354
647	8749	164	5	9124	164	876	353
648	8913	164	4	9288	165	712	352
649	9077	163	4	9453	164	547	351
0.02650	8.619240	163	9.999624	8.619617	164	11.380383	0.97350
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.973.

0.026.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.02650	8.619240	164	9.999624	8.619617	164	11.380383	0.97350
651	9404	164	3	9781	164	0219	349
652	9568	163	3	8.619945	164	11.380055	348
653	9731	164	3	8.620109	164	11.379891	347
654	8.619895	164	3	0273	164	9728	346
655	8.620039	163	2	0436	163	9564	345
656	0222	163	2	0600	164	9400	344
657	0385	164	2	0764	163	9236	343
658	0549	163	1	0927	164	9073	342
659	0712	163	1	1091	164	8909	341
0.02660	0875	163	1	1254	163	8746	0.97340
661	1038	163	1	1418	164	8582	339
662	1201	163	9.999620	1581	163	8419	338
663	1364	163	9.999620	1745	164	8256	337
664	1527	163	20	1908	163	8092	336
665	1690	163	9	2071	163	7929	335
666	1853	163	9	2234	163	7766	334
667	2016	163	9	2397	163	7603	333
668	2179	162	9	2560	163	7440	332
669	2341	163	8	2723	163	7277	331
0.02670	2504	162	8	2886	163	7114	0.97330
671	2666	163	8	3049	163	6951	329
672	2829	162	7	3212	162	6789	328
673	2991	163	7	3374	162	6626	327
674	3154	162	7	3537	163	6463	326
675	8.623316	162	9.999617	8.623699	162	11.376301	325
676	3478	162	6	3862	162	6138	324
677	3640	162	6	4024	162	5976	323
678	3802	162	6	4187	163	5813	322
679	3964	162	5	4349	162	5651	321
0.02680	4126	162	5	4511	163	5489	0.97320
681	4288	162	5	4674	162	5327	319
682	4450	162	5	4836	162	5164	318
683	4612	162	4	4998	162	5002	317
684	4774	161	4	5160	162	4840	316
685	4935	162	4	5322	162	4678	315
686	5097	162	3	5484	162	4516	314
687	5259	161	3	5646	161	4355	313
688	5420	162	3	5807	162	4193	312
689	5582	161	3	5969	162	4031	311
0.02690	5743	161	2	6131	161	3869	0.97310
691	5904	162	2	6292	162	3708	309
692	6066	161	2	6454	161	3546	308
693	6227	161	1	6615	162	3385	307
694	6388	161	1	6777	161	3223	306
695	6549	161	1	6938	162	3062	305
696	6710	161	0	7100	161	2901	304
697	6871	161	9.999610	7261	161	2739	303
698	7032	161	9.999610	7422	161	2578	302
699	7193	160	10	7583	161	2417	301
0.02700	8.627353	160	9.999609	8.627744	161	11.372256	0.97300
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.973.

0.027.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.02700	8.627353	161	9.999609	8.627744	161	11.372256	0.97300
701	7514	161	9	7905	161	2095	299
702	7675	160	9	8066	161	1934	298
703	7835	161	8	8227	161	1773	297
704	7996	161	8	8388	161	1612	296
705	8157	160	8	8549	160	1451	295
706	8317	160	8	8709	161	1291	294
707	8477	161	7	8870	161	1130	293
708	8638	160	7	9031	160	0969	292
709	8798	160	7	9191	161	0809	291
0.02710	8958	160	6	9352	160	0648	0.97290
711	9118	160	6	9512	160	0488	289
712	9278	160	6	9672	161	0328	288
713	9438	160	6	9833	160	0167	287
714	9598	160	5	8.629993	160	11.370007	286
715	9758	160	5	8.630153	160	11.369847	285
716	8.629918	160	5	0313	160	9687	284
717	8.630078	160	4	0473	160	9527	283
718	0237	159	4	0633	160	9367	282
719	0397	160	4	0793	160	9207	281
0.02720	0557	160	4	0953	160	9047	0.97280
721	0716	159	3	1113	160	8887	279
722	0876	160	3	1273	160	8727	278
723	1035	159	3	1433	160	8568	277
724	1195	160	2	1592	159	8408	276
725	8.631354	159	9.999602	8.631752	160	11.368248	275
726	1513	159	2	1911	160	8089	274
727	1672	159	1	2071	159	7929	273
728	1831	159	1	2230	160	7770	272
729	1990	159	1	2390	159	7611	271
0.02730	2149	159	1	2549	159	7451	0.97270
731	2308	159	0	2708	159	7292	269
732	2467	159	9.999600	2867	159	7133	268
733	2626	159	9.999600	3026	160	6974	267
734	2785	159	9	3186	159	6815	266
735	2944	158	9	3345	159	6656	265
736	3102	159	9	3504	158	6497	264
737	3261	158	9	3662	159	6338	263
738	3419	159	8	3821	159	6179	262
739	3578	158	8	3980	159	6020	261
0.02740	3736	158	8	4139	159	5861	0.97260
741	3895	159	7	4297	158	5703	259
742	4053	158	7	4456	159	5544	258
743	4211	159	7	4615	158	5385	257
744	4370	158	7	4773	159	5227	256
745	4528	158	6	4932	158	5069	255
746	4686	158	6	5090	158	4910	254
747	4844	158	6	5248	159	4752	253
748	5002	158	5	5407	158	4594	252
749	5160	158	5	5565	158	4435	251
0.02750	8.635318	158	9.999595	8.635723	158	11.364277	0.97250
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.972.

0.027.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.02750	8.635318	157	9.999595	8.635723	158	11.364277	0.97250
751	5475	158	4	5881	158	4119	249
752	5633	158	4	6039	158	3961	248
753	5791	157	4	6197	158	3803	247
754	5948	158	4	6355	158	3645	246
755	6106	158	3	6513	158	3487	245
756	6263	157	3	6671	158	3330	244
757	6421	158	3	6828	157	3172	243
758	6578	157	2	6986	158	3014	242
759	6736	158	2	7144	158	2856	241
0.02760	6893	157	2	7301	157	2699	0.97240
761	7050	157	1	7459	158	2541	239
762	7207	157	1	7616	157	2384	238
763	7364	157	1	7774	158	2226	237
764	7522	158	1	7931	157	2069	236
765	7679	157	0	8088	157	1912	235
766	7835	156	9.999590	8246	158	1755	234
767	7992	157	9.999590	8403	157	1597	233
768	8149	157	9	8560	157	1440	232
769	8306	157	9	8717	157	1283	231
0.02770	8463	157	9	8874	157	1126	0.97230
771	8619	156	9	9031	157	0969	229
772	8776	157	8	9188	157	0812	228
773	8932	156	8	9345	157	0656	227
774	9089	157	8	9501	156	0499	226
775	9245	156	9.999587	9658	157	0342	225
776	9402	157	7	9815	156	0185	224
777	9558	156	7	8.639971	156	11.360029	223
778	9714	156	6	8.640128	157	11.359872	222
779	8.639871	157	6	0284	156	9716	221
0.02780	8.640027	156	6	0441	157	9559	0.97220
781	0183	156	6	0597	156	9403	219
782	0339	156	5	0754	157	9246	218
783	0495	156	5	0910	156	9090	217
784	0651	156	5	1066	156	8934	216
785	0807	155	4	1222	156	8778	215
786	0962	156	4	1378	156	8622	214
787	1118	156	4	1534	156	8466	213
788	1274	156	3	1690	156	8310	212
789	1430	156	3	1846	156	8154	211
0.02790	1585	155	3	2002	156	7998	0.97210
791	1741	155	3	2158	156	7842	209
792	1896	156	2	2314	156	7686	208
793	2052	155	2	2470	155	7530	207
794	2207	155	2	2625	155	7375	206
795	2362	155	1	2781	156	7219	205
796	2517	155	1	2936	155	7064	204
797	2673	156	1	3092	156	6908	203
798	2828	155	0	3247	155	6753	202
799	2983	155	9.999580	3403	156	6597	201
0.02800	8.643138	155	9.999580	8.643558	155	11.356442	0.97200
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.972.

0.028.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.02800	8.643138	155	9.999580	8.643558	155	11.356442	0.97200
801	3293	155	80	3713	155	6287	199
802	3448	155	9	3869	155	6131	198
803	3603	155	9	4024	155	5976	197
804	3758	154	0	4179	155	5821	196
805	3912	155	8	4334	155	5666	195
806	4067	155	8	4489	155	5511	194
807	4222	154	8	4644	155	5356	193
808	4376	155	7	4799	155	5201	192
809	4531	154	7	4954	154	5046	191
0.02810	4685	155	7	5108	155	4892	0.97190
811	4840	154	7	5263	155	4737	189
812	4994	154	6	5418	154	4582	188
813	5148	155	6	5572	155	4428	187
814	5303	154	6	5727	155	4273	186
815	5457	154	5	5882	154	4119	185
816	5611	154	5	6036	154	3964	184
817	5765	154	5	6190	155	3810	183
818	5919	154	4	6345	154	3655	182
819	6073	154	4	6499	154	3501	181
0.02820	6227	154	4	6653	154	3347	0.97180
821	6381	154	4	6807	155	3193	179
822	6535	153	3	6962	154	3039	178
823	6688	154	3	7116	154	2885	177
824	6842	154	3	7270	154	2730	176
825	8.646996	153	9.999572	8.647424	153	11.352577	175
826	7149	154	2	7577	154	2423	174
827	7303	153	2	7731	154	2269	173
828	7456	154	1	7885	154	2115	172
829	7610	153	1	8039	154	1961	171
0.02830	7763	154	1	8193	153	1808	0.97170
831	7917	153	0	8346	154	1654	169
832	8070	153	9.999570	8500	153	1500	168
833	8223	153	9.999570	8653	154	1347	167
834	8376	153	70	8807	153	1193	166
835	8529	154	9	8960	154	1040	165
836	8683	153	9	9114	153	0887	164
837	8836	152	9	9267	153	0733	163
838	8988	153	8	9420	153	0580	162
839	9141	153	8	9573	153	0427	161
0.02840	9294	153	8	9726	154	0274	0.97160
841	9447	153	7	8.649880	153	11.350121	159
842	9600	152	7	8.650033	153	11.349967	158
843	9752	153	7	0186	153	9814	157
844	8.649905	153	7	0339	152	9662	156
845	8.650058	152	6	0491	153	9509	155
846	0210	153	6	0644	153	9356	154
847	0363	152	6	0797	158	9203	153
848	0515	152	5	0950	152	9050	152
849	0667	153	5	1102	153	8898	151
0.02850	8.650820	153	9.999565	8.651255	153	11.348745	0.97150
Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.

0.971.

0.628.

Arc.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.02850	8.650820		9.999565	8.651255		11.348745	0.97150
851	0972	152	4	1408	153	8592	149
852	1124	152	4	1560	152	8440	148
853	1276	152	4	1713	153	8288	147
854	1428	152	3	1865	152	8135	146
855	1580	152	3	2017	152	7983	145
		152			153		
856	1732	152	3	2170	152	7830	144
857	1884	152	3	2322	152	7678	143
858	2036	152	2	2474	152	7526	142
859	2188	152	2	2626	152	7374	141
0.02860	2340	152	2	2778	152	7222	0.97140
		152			152		
861	2492	151	1	2930	152	7070	139
862	2643	152	1	3082	152	6918	138
863	2795	151	1	3234	152	6766	137
864	2946	152	0	3386	152	6614	136
865	3098	151	9.999560	3538	152	6462	135
		152	9.999560	3690	151	6310	134
866	3249	151	9	3841	152	6159	133
867	3401	151	9	3993	152	6007	132
868	3552	151	9	4145	151	5855	131
869	3703	152	9	4296	152	5704	0.97130
0.02870	3855	151			151		
871	4006	151	8	4448	151	5552	129
872	4157	151	8	4599	152	5401	128
873	4308	151	8	4751	151	5250	127
874	4459	151	7	4902	151	5098	126
875	8.654610	151	9.999557	8.655053	151	11.344947	125
		151			151		
876	4761	151	7	5204	152	4796	124
877	4912	151	6	5356	151	4645	123
878	5063	151	6	5507	151	4493	122
879	5214	150	6	5658	151	4342	121
0.02880	5364	151	5	5809	151	4191	0.97120
		151			151		
881	5515	151	5	5960	151	4040	119
882	5666	150	5	6111	151	3889	118
883	5816	151	5	6262	150	3739	117
884	5967	150	4	6412	151	3588	116
885	6117	150	4	6563	151	3437	115
		150			151		
886	6267	151	4	6714	151	3286	114
887	6418	150	3	6865	150	3136	113
888	6568	150	3	7015	151	2985	112
889	6718	151	3	7166	150	2834	111
0.02890	6869	150	2	7316	150	2684	0.97110
		150			151		
891	7019	150	2	7467	150	2533	109
892	7169	150	2	7617	150	2383	108
893	7319	150	1	7767	151	2233	107
894	7469	150	1	7918	150	2082	106
895	7619	150	1	8068	150	1932	105
		150			150		
896	7769	150	1	8218	150	1782	104
897	7919	149	9.999550	8368	150	1632	103
898	8068	150	9.999550	8518	150	1482	102
899	8218	150	50	8668	150	1332	101
0.02900	8.658368	150	9.999549	8.658818	150	11.341182	0.97100
		150			150		
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.971.

0.029.

Are.	Log. Sin.	Dif.	Log. Cosin.	Log. Tang.	Dif.	Log. Cot.	Are.
0.02900	8.658368	149	9.999549	8.658818	150	11.341182	0.97100
901	8517	150	9	8968	150	1032	099
902	8667	149	9	9118	150	0882	098
903	8816	150	8	9268	150	0732	097
904	8966	149	8	9418	150	0582	096
905	9115	150	8	9568	150	0432	095
906	9265	149	7	9717	149	0283	094
907	9414	149	7	8.659867	150	11.340133	093
908	9563	150	7	8.660017	149	11.339984	092
909	9713	149	6	0166	150	9834	091
0.02910	8.659862	149	6	0316	149	9685	0.97090
911	8.660011	149	6	0465	149	9535	089
912	0160	149	6	0614	149	9386	088
913	0309	149	5	0764	150	9236	087
914	0458	149	5	0913	149	9087	086
915	0607	149	5	1062	149	8938	085
916	0756	148	4	1211	149	8789	084
917	0904	149	4	1360	150	8640	083
918	1053	149	4	1510	149	8491	082
919	1202	148	3	1659	148	8342	081
0.02920	1350	149	3	1807	149	8193	0.97080
921	1499	149	3	1956	149	8044	079
922	1648	148	2	2105	149	7895	078
923	1796	148	2	2254	149	7746	077
924	1945	149	2	2403	149	7597	076
925	8.662093	148	1	8.662552	149	11.337449	075
926	2241	149	1	2700	149	7300	074
927	2390	148	1	2849	148	7151	073
928	2538	148	1	2997	149	7003	072
929	2686	148	9.999540	3146	149	6854	071
0.02930	2834	148	9.999540	3294	148	6706	0.97070
931	2982	148	40	3443	149	6557	069
932	3130	148	9	3591	148	6409	068
933	3278	148	9	3739	149	6261	067
934	3426	148	9	3888	148	6112	066
935	3574	148	8	4036	148	5964	065
936	3722	148	8	4184	148	5816	064
937	3870	148	8	4332	148	5668	063
938	4018	147	7	4480	148	5520	062
939	4165	148	7	4628	148	5372	061
0.02940	4313	147	7	4776	148	5224	0.97060
941	4460	148	6	4924	148	5076	059
942	4608	147	6	5072	148	4928	058
943	4755	148	6	5220	147	4780	057
944	4903	147	6	5367	148	4633	056
945	5050	148	5	5515	148	4485	055
946	5198	147	5	5663	147	4337	054
947	5345	147	5	5810	148	4190	053
948	5492	147	4	5958	147	4042	052
949	5639	148	4	6105	148	3895	051
0.02950	8.665787	148	9.999534	8.666253	148	11.333747	0.97050
Are.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Are.

0.970.

0.029.

Arc.	Log. Sin.		Log. Cosin.	Log. Tang.		Log. Cot.	Arc.
0.02950	8.665787	Dif.	9.999534	8.666253	Dif.	11.333747	0.97050
951	5934	147	3	6400	147	3600	049
952	6081	147	3	6548	148	3452	048
953	6228	147	3	6695	147	3305	047
954	6375	147	2	6842	147	3158	046
955	6521	146	2	6989	147	3011	045
956	6668	147	2	7137	148	2863	044
957	6815	147	1	7284	147	2716	043
958	6962	147	1	7431	147	2569	042
959	7109	147	1	7578	147	2422	041
0.02960	7255	146	0	7725	147	2275	0.97040
961	7402	147	9.999530	7872	147	2128	039
962	7548	146	9.999530	8019	147	1982	038
963	7695	147	9	8165	146	1835	037
964	7841	146	9	8312	147	1688	036
965	7988	147	9	8459	147	1541	035
966	8134	146	9	8605	146	1395	034
967	8280	146	8	8752	147	1248	033
968	8426	146	8	8899	147	1101	032
969	8573	147	8	9045	146	0955	031
0.02970	8719	146	7	9192	147	0808	0.97030
971	8865	146	7	9338	146	0662	029
972	9011	146	7	9484	146	0516	028
973	9157	146	6	9631	147	0369	027
974	9303	146	6	9777	146	0223	026
975	9449	146	9.999526	8.666923	146	11.330077	025
976	9595	146	5	8.670069	146	11.329931	024
977	9740	145	5	0215	146	9785	023
978	8.669886	146	5	0362	147	9639	022
979	8.670032	146	4	0508	146	9493	021
0.02980	0178	146	4	0654	146	9347	0.97020
981	0323	145	4	0799	145	9201	019
982	0469	146	3	0945	146	9055	018
983	0614	145	3	1091	146	8909	017
984	0760	146	3	1237	146	8763	016
985	0905	145	2	1383	146	8617	015
986	1050	145	2	1528	145	8472	014
987	1196	146	2	1674	146	8326	013
988	1341	145	2	1820	146	8181	012
989	1486	145	1	1965	145	8035	011
0.02990	1631	145	1	2111	146	7889	0.97010
991	1777	146	1	2256	145	7744	009
992	1922	145	9.999520	2401	145	7599	008
993	2067	145	9.999520	2547	146	7453	007
994	2212	145	20	2692	145	7308	006
995	2357	145	19	2837	145	7163	005
996	2501	144	19	2983	146	7018	004
997	2646	145	19	3128	145	6872	003
998	2791	145	18	3273	145	6727	002
0.02999	2936	145	18	3418	145	6582	001
0.03000	8.673080	144	9.999518	8.673563	145	11.326437	0.97000
Arc.	Log. Cosin.	Dif.	Log. Sin.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.970.

0.030

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.0300	8.673080	1445	9.999518	4	8.673563	1447	11.326437	0.9700
01	4525	1439	14	3	5010	1443	4090	0.9699
02	5964	1435	11	3	6453	1438	3547	98
03	7309	1429	08	3	7891	1433	2109	97
04	8.678828	1426	05	4	8.679324	1428	11.320676	96
05	8.680254	1420	9.999501	3	8.680752	1424	11.319248	95
06	1674	1416	9.999498	3	2176	1419	7824	94
07	3090	1411	95	3	3595	1415	6405	93
08	4501	1407	92	4	5010	1410	4900	92
09	5908	1402	88	3	6420	1405	3580	91
0.0310	7310	1398	85	3	7825	1401	2175	0.9690
11	8.688708	1393	82	4	8.689226	1396	11.310774	89
12	8.690101	1388	78	3	8.690622	1392	11.3093-8	88
13	1489	1384	75	3	2014	1388	7986	87
14	2873	1380	72	4	3402	1383	6598	86
15	4253	1376	68	3	4785	1379	5215	85
16	5629	1371	65	4	6164	1374	3836	84
17	7000	1366	61	3	7538	1370	2462	83
18	8366	1363	58	3	8.698908	1366	11.301092	82
19	8.699729	1358	55	4	8.700274	1362	11.299726	81
0.0320	8.701087	1354	51	3	1636	1357	8364	0.9680
21	2441	1350	48	4	2093	1353	7007	79
22	3791	1345	44	3	4346	1349	5654	78
23	5136	1341	41	4	5695	1345	4305	77
24	6477	1338	37	3	7040	1341	2960	76
25	7815	1333	9.999434	4	8381	1336	1619	75
26	8.709148	1329	30	3	8.709717	1333	11.290283	74
27	8.710477	1325	27	4	8.711050	1328	11.288950	73
28	1802	1320	23	3	2378	1325	7622	72
29	3122	1317	20	4	3703	1320	6297	71
0.0330	4439	1313	16	3	5023	1317	4977	0.9670
31	5752	1309	13	4	6340	1312	3661	69
32	7061	1305	09	3	7652	1309	2348	68
33	8366	1301	06	4	8.718961	1304	11.281040	67
34	8.719667	1297	9.999402	4	8.720265	1301	11.279735	66
35	8.720964	1294	9.999398	3	1566	1297	8434	65
36	2258	1289	95	4	2863	1293	7137	64
37	3547	1286	91	3	4156	1289	5844	63
38	4833	1281	88	4	5445	1285	4555	62
39	6114	1278	84	4	6730	1282	3270	61
0.0340	7392	1275	80	3	8012	1278	1988	0.9660
41	8667	1270	77	4	8.729290	1274	11.270710	59
42	8.729937	1267	73	4	8.730564	1271	11.269436	58
43	8.731204	1263	69	3	1835	1266	8166	57
44	2467	1259	66	4	3101	1263	6899	56
45	3726	1256	62	4	4364	1260	5636	55
46	4982	1252	58	3	5624	1256	4376	54
47	6234	1249	55	4	6880	1252	3120	53
48	7483	1245	51	4	8132	1249	1868	52
49	8728	1241	47	4	8.739381	1245	11.260619	51
0.0350	8.739969	1241	9.999343	4	8.740626	1245	11.259374	0.9650
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.035

Arc.	Log. Sin.	Dif.	Log. Cos.	D.	Log. Tang.	Dif.	Log. Cot.	Area
0.0350	8.730969	1238	9.999343	3	8.740626	1241	11.259374	0.9650
51	8.741207	1234	40	4	1867	1238	8133	49
52	2441	1231	36	4	3105	1235	6895	48
53	3672	1227	32	4	4340	1231	5660	47
54	4899	1224	28	4	5571	1228	4429	46
55	6123	1221	24	3	6799	1224	3201	45
56	7344	1216	21	4	8023	1221	1977	44
57	8560	1214	17	4	8.749244	1217	11.250756	43
58	8.749774	1210	13	4	8.750461	1214	11.249539	42
59	8.750984	1207	09	4	1675	1211	8325	41
0.0360	2191	1203	05	4	2886	1207	7114	0.9640
61	3394	1200	9.999301	3	4093	1204	5907	39
62	4594	1197	9.999298	4	5297	1201	4703	38
63	5791	1194	94	4	6498	1197	3503	37
64	6985	1190	90	4	7695	1194	2305	36
65	8175	1187	86	4	8.758889	1191	11.241111	35
66	8.759362	1183	82	4	8.760080	1187	11.239920	34
67	8.760545	1181	78	4	1267	1185	8733	33
68	1726	1177	74	4	2452	1181	7548	32
69	2903	1174	70	4	3633	1178	6367	31
0.0370	4077	1171	66	4	4811	1175	5189	0.9630
71	5248	1168	62	4	5986	1172	4014	29
72	6416	1164	58	4	7158	1168	2843	28
73	7580	1162	54	4	8326	1166	1674	27
74	8742	1158	50	4	8.769492	1162	11.239509	26
75	8.769900	1155	46	4	8.770654	1159	11.229346	25
76	8.771055	1152	42	4	1813	1156	8187	24
77	2207	1150	38	4	2969	1154	7031	23
78	3357	1146	34	4	4123	1150	5878	22
79	4503	1143	30	4	5273	1147	4727	21
0.0380	5646	1140	26	4	6420	1144	3580	0.9620
81	6786	1137	22	4	7564	1141	2436	19
82	7923	1134	18	4	8705	1138	1295	18
83	8.779057	1131	14	4	8.779843	1135	11.220157	17
84	8.780188	1128	10	5	8.780978	1133	11.219022	16
85	1316	1125	05	4	2111	1129	7890	15
86	2441	1122	9.999201	4	3240	1126	6750	14
87	3563	1120	9.999197	4	4366	1124	5634	13
88	4683	1116	93	4	5490	1121	4510	12
89	5799	1114	89	4	6611	1117	3390	11
0.0390	6913	1111	85	4	7728	1115	2272	0.9610
91	8024	1108	80	4	8843	1112	1157	09
92	8.789132	1105	76	4	8.789955	1110	11.210045	08
93	8.790237	1102	72	4	8.791065	1106	11.208935	07
94	1330	1099	68	4	2171	1104	7829	06
95	2438	1097	64	4	3275	1101	6725	05
96	3535	1094	59	4	4376	1098	5624	04
97	4629	1091	55	4	5474	1095	4526	03
98	5720	1088	51	4	6569	1093	3431	02
0.0399	6808	1086	47	4	7662	1090	2338	01
0.0400	8.797894	1086	9.999142	5	8.798752	1090	11.201248	0.9600
Arc.	Log. Sin.	Dif.	Log. Cos.	D.	Log. Tang.	Dif.	Log. Cot.	Area

0.960

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.0400	8.797894		9.999142		8.798752		11.201248	0.9600
01	8.798977	1083		38	8.799839	1087	11.200161	0.9599
02	8.800057	1080		34	8.800924	1085	11.199076	98
03	1135	1078		29	2006	1082	7994	97
04	2210	1075		25	3085	1079	6915	96
05	3282	1072		21	4161	1076	5839	95
		1070				1074		
06	4352	1066		16	5235	1072	4765	94
07	5418	1065		12	6307	1068	3694	93
08	6483	1061		08	7375	1066	2625	92
09	7544	1060	9.999103		8441	1064	1559	91
0.0410	8604	1056	9.999099		8.809505	1061	11.190495	0.9590
11	8.809560	1054		94	8.810566	1058	11.189434	89
12	8.810714	1051		90	1624	1056	8376	88
13	1765	1049		86	2680	1053	7320	87
14	2814	1046		81	3733	1051	6267	86
15	3860	1044		77	4784	1048	5216	85
		1041						
16	4904	1041		72	5832	1046	4168	84
17	5945	1039		68	6878	1043	3122	83
18	6984	1036		63	7921	1041	2079	82
19	8020	1034		59	8962	1038	1038	81
0.0420	8.819054	1031		54	8.820000	1036	11.180000	0.9580
21	8.820085	1029		50	8.821036	1033	11.178964	79
22	1114	1027		45	2069	1031	7931	78
23	2141	1024		41	3100	1029	6900	77
24	3165	1021		36	4129	1026	5872	76
25	4186	1019		32	5155	1023	4845	75
		1017						
26	5205	1017		27	6178	1022	3822	74
27	6222	1014		22	7200	1019	2800	73
28	7236	1012		18	8219	1016	1781	72
29	8248	1010		13	8.829235	1015	11.170765	71
0.0430	8.829258	1007		09	8.830250	1011	11.169751	0.9570
31	8.830265	1005	9.999004		1261	1010	8739	69
32	1270	1003	9.998999		2271	1007	7729	68
33	2273	1000		95	3278	1005	6722	67
34	3273	998		90	4283	1003	5717	66
35	4271	996		85	5286	1000	4714	65
		993						
36	5267	993		81	6286	998	3714	64
37	6260	991		76	7284	996	2716	63
38	7251	989		71	8280	994	1720	62
39	8240	987		67	8.839274	991	11.160727	61
0.0440	8.839227	984		62	8.840265	989	11.159735	0.9560
41	8.840211	982		57	1254	987	8746	59
42	1193	980		52	2241	984	7759	58
43	2173	978		48	3225	983	6755	57
44	3151	975		43	4208	980	5792	56
45	4126	973		38	5188	978	4812	55
		972						
46	5099	972		33	6166	976	3834	54
47	6071	968		29	7142	974	2858	53
48	7039	967		24	8116	971	1884	52
49	8006	965		19	8.849087	970	11.150913	51
0.0450	8.848971		9.998914		8.850057		11.149943	0.9550
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.045.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.0450	8.848971		9.998914	5	8.850057		11.149943	0.9550
51	8.849933	962	9.998909	5	1024	967	8976	49
52	8.850893	960	9.998904	5	1989	965	8011	48
53	1852	959	9.998900	4	2952	963	7048	47
54	2808	956		5	3913	961	6087	46
55	3762	954		5	4872	959	5128	45
		951		5		956		
56	4713	950	85	5	5828	955	4172	44
57	5663	948	80	5	6783	953	3217	43
58	6611	945	75	5	7736	950	2265	42
59	7556	944	70	5	8686	949	1314	41
0.0460	8500	941	65	5	8.859635	946	11.140366	0.9540
61	8.859441	940	60	5	8.860581	944	11.139419	39
62	8.860381	937	55	5	1525	943	8475	38
63	1318	935	50	5	2468	940	7533	37
64	2253	934	45	4	3408	938	6592	36
65	3187	931	41	5	4346	936	5654	35
66	4118	929	36	5	5282	935	4718	34
67	5047	928	31	6	6217	932	3783	33
68	5975	925	25	5	7149	930	2851	32
69	6900	923	20	5	8079	929	1921	31
0.0470	7823	922	15	5	9008	926	0992	0.9530
71	8745	919	10	5	8.869934	925	11.130066	29
72	8.869664	917	05	5	8.870859	922	11.129141	28
73	8.870581	916	9.998800	5	1781	921	8219	27
74	1497	914	9.998795	5	2702	919	7298	26
75	2411	911	90	5	3621	916	6380	25
76	3322	910	85	5	4537	915	5463	24
77	4232	908	80	5	5452	913	4548	23
78	5140	906	75	5	6365	911	3635	22
79	6046	904	70	6	7276	909	2724	21
0.0480	6950	902	64	5	8185	908	1815	0.9520
81	7852	900	59	5	9093	905	0908	19
82	8752	898	54	5	8.879998	903	11.120002	18
83	8.879650	897	49	5	8.880901	902	11.119099	17
84	8.880547	894	44	5	1803	900	8197	16
85	1441	893	39	6	2703	898	7297	15
86	2334	891	33	5	3601	896	6399	14
87	3225	889	28	5	4497	895	5503	13
88	4114	888	23	5	5392	892	4609	12
89	5002	885	18	6	6284	891	3716	11
0.0490	5887	884	12	5	7175	889	2825	0.9510
91	6771	882	07	5	8064	887	1936	09
92	7653	880	9.998702	5	8951	885	1049	08
93	8533	878	9.998697	5	8.889836	884	11.110164	07
94	8.889411	876	91	5	8.890720	882	11.109280	06
95	8.890287	875	86	5	1602	880	8399	05
96	1162	873	81	6	2482	878	7518	04
97	2035	871	75	5	3360	876	6640	03
98	2906	870	70	5	4236	875	5764	02
0.0499	3776	867	65	5	5111	873	4889	01
0.0500	8.894643	867	9.998659	6	8.895984		11.104016	0.9500
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.950.

0.050.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.0500	8.894643	866	9.998659	5	8.895984	872	11.104016	0.9500
01	5509	864	54	6	6856	869	3145	0.9499
02	6373	863	48	5	7725	868	2275	98
03	7236	861	43	5	8593	866	1407	97
04	8097	859	38	6	8.899459	865	11.100541	96
05	8956	857	32	5	8.900324	862	11.099677	95
06	8.899813	856	27	6	1186	861	8814	94
07	8.900669	854	21	5	2047	860	7953	93
08	1523	852	16	6	2907	858	7093	92
09	2375	850	10	5	3765	856	6236	91
0.0510	3225	849	9.998605	6	4621	854	5380	0.9490
11	4074	848	9.998599	5	5475	853	4525	89
12	4922	845	94	6	6328	851	3672	88
13	5767	844	88	5	7179	849	2821	87
14	6611	842	83	6	8028	848	1972	86
15	7453	841	77	5	8876	846	1124	85
16	8294	839	72	6	8.909722	845	11.090278	84
17	9133	837	66	5	8.910567	843	11.089433	83
18	8.909970	836	61	6	1410	841	8590	82
19	8.910806	834	55	5	2251	840	7749	81
0.0520	1640	833	50	6	3091	838	6909	0.9480
21	2473	831	44	6	3929	836	6071	79
22	3304	829	38	5	4765	835	5235	78
23	4133	828	33	6	5600	834	4400	77
24	4961	826	27	5	6434	831	3567	76
25	5787	824	22	6	7265	831	2735	75
26	6611	823	16	6	8096	828	1905	74
27	7434	822	10	5	8924	827	1076	73
28	8256	820	9.998505	6	8.919751	826	11.080249	72
29	9076	818	9.998499	6	8.920577	824	11.079423	71
0.0530	8.919894	817	93	5	1401	822	8599	0.9470
31	8.920711	815	88	6	2223	821	7777	69
32	1526	814	82	6	3044	820	6956	68
33	2340	812	76	6	3864	817	6137	67
34	3152	810	70	5	4681	817	5319	66
35	3962	809	65	6	5498	815	4502	65
36	4771	808	59	6	6313	813	3687	64
37	5579	806	53	6	7126	812	2874	63
38	6385	805	47	5	7938	810	2062	62
39	7190	803	42	6	8748	809	1252	61
0.0540	7993	801	36	6	8.929557	807	11.070443	0.9460
41	8794	800	30	6	8.930364	806	11.069636	59
42	8.929594	799	24	6	1170	805	8830	58
43	8.930393	797	18	5	1975	803	8025	57
44	1190	796	13	6	2778	801	7222	56
45	1986	794	07	6	3579	800	6421	55
46	2780	793	9.998401	6	4379	799	5621	54
47	3573	791	9.998395	6	5178	797	4822	53
48	4364	790	89	6	5975	796	4025	52
49	5154	788	83	6	6771	794	3229	51
0.0550	8.935942	788	9.998377	6	8.937565	794	11.062435	0.9450
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.945.

0.055.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arg.
0.0550	8.935942	787	9.998377	6	8.937565	793	11.062435	0.9450
51	6729	786	71	6	8358	791	1642	49
52	7515	784	65	6	9149	790	0851	48
53	8209	782	59	5	8.939939	789	11.060061	47
54	9081	782	54	6	8.940728	787	11.059272	46
55	8.939863	779	48	6	1515	786	8485	45
56	8.940642	779	42	6	2301	784	7609	44
57	1421	779	36	6	3085	783	6915	43
58	2198	777	30	6	3868	782	6132	42
59	2974	776	24	6	4650	780	5350	41
0.0560	3748	774	18	6	5430	779	4570	0.9440
61	4521	773	12	6	6209	777	3791	39
62	5292	771	9.998306	6	6986	777	3014	38
63	6062	770	9.998300	7	7763	774	2238	37
64	6831	769	293	6	8537	774	1463	36
65	7598	767	87	6	8.949311	774	11.050689	35
66	8364	766	81	6	8.950083	772	11.049917	34
67	9129	765	75	6	0853	770	9147	33
68	8.949892	763	69	6	1623	770	8377	32
69	8.950654	762	63	6	2391	768	7609	31
0.0570	1414	760	57	6	3157	766	6843	0.9430
71	2174	757	51	6	3923	764	6077	29
72	2931	757	45	6	4687	763	5313	28
73	3688	755	39	7	5450	761	4551	27
74	4443	754	32	7	6211	760	3789	26
75	5197	753	26	6	6971	759	3029	25
76	5950	751	20	6	7730	757	2270	24
77	6701	750	14	6	8487	756	1513	23
78	7451	749	08	6	9243	755	0757	22
79	8200	747	9.998201	7	8.959998	754	11.040002	21
0.0580	8947	746	9.998195	6	8.960752	752	11.039248	0.9420
81	8.959663	745	89	6	1504	751	8496	19
82	8.960438	743	83	6	2255	750	7745	18
83	1181	742	76	7	3005	748	6995	17
84	1923	741	70	6	3753	748	6247	16
85	2664	740	64	6	4501	746	5499	15
86	3404	738	58	7	5247	744	4754	14
87	4142	738	51	7	5991	744	4009	13
88	4880	735	45	6	6735	742	3265	12
89	5615	735	39	6	7477	741	2523	11
0.0590	6350	733	32	7	8218	740	1782	0.9410
91	7083	733	26	6	8958	738	1043	09
92	7816	730	20	6	8.969696	737	11.030304	08
93	8546	730	13	7	8.970433	736	11.029567	07
94	8.969276	728	07	6	1169	735	8831	06
95	8.970004	728	9.998100	7	1904	734	8096	05
96	0732	726	9.998094	6	2638	732	7363	04
97	1458	724	88	6	3370	731	6630	03
98	2182	724	81	7	4101	730	5899	02
0.0600	2906	722	75	6	4831	729	5169	01
0.0600	8.973628	722	9.998068	7	8.975560	729	11.024440	0.9400

0.940.

0.060.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.0600	8.973628	721	9.998068	6	8.975560	727	11.024440	0.9400
01	4349	720	62	7	6287	727	3713	0.9399
02	5060	719	55	6	7014	725	2986	98
03	5788	717	49	7	7739	724	2261	97
04	6505	716	42	6	8463	722	1537	96
05	7221	715	36	7	9185	722	0815	95
06	7936	714	29	6	8.979707	720	11.020093	94
07	8650	713	23	7	8.980627	720	11.019373	93
08	8.979363	712	16	6	1347	718	8653	92
09	8.980075	710	10	7	2065	717	7935	91
0.0610	0785	709	9.998003	6	2782	715	7218	0.9390
11	1494	708	9.997997	7	3497	715	6503	89
12	2202	707	90	6	4212	714	5788	88
13	2900	706	84	7	4926	712	5075	87
14	3615	704	77	7	5638	711	4362	86
15	4319	704	70	6	6349	710	3651	85
16	5023	702	64	7	7059	709	2941	84
17	5725	701	57	6	7768	708	2232	83
18	6426	700	51	7	8476	706	1524	82
19	7126	699	44	7	9182	706	0818	81
0.0620	7825	698	37	6	8.989888	704	11.010112	0.9380
21	8523	696	31	7	8.990592	703	11.009408	79
22	9219	696	24	7	1295	702	8705	78
23	8.989915	694	17	7	1997	701	8003	77
24	8.990609	693	10	6	2698	700	7302	76
25	1302	692	9.997904	7	3398	699	6602	75
26	1994	691	9.997897	7	4097	698	5903	74
27	2685	690	90	6	4795	696	5205	73
28	3375	689	84	7	5491	696	4509	72
29	4064	687	77	7	6187	694	3813	71
0.0630	4751	687	70	7	6881	694	3119	0.9370
31	5438	685	63	7	7575	692	2425	69
32	6123	685	56	6	8267	691	1733	68
33	6808	683	50	7	8958	690	1042	67
34	7491	682	43	7	8.999648	689	11.000352	66
35	8173	681	36	7	9.000337	688	10.999663	65
36	8854	680	29	7	1025	687	8975	64
37	8.999534	679	22	7	1712	686	8288	63
38	9.000213	678	15	6	2398	685	7602	62
39	0891	677	9	7	3083	683	6917	61
0.0640	1568	676	9.997802	7	3766	683	6234	0.9360
41	2244	675	9.997795	7	4449	682	5551	59
42	2919	673	88	7	5131	680	4869	58
43	3592	673	81	7	5811	680	4189	57
44	4265	671	74	7	6491	678	3509	56
45	4936	671	67	7	7169	678	2831	55
46	5607	669	60	7	7847	676	2153	54
47	6276	669	53	7	8523	675	1477	53
48	6945	667	46	7	9198	675	0802	52
49	7612	666	39	7	9.009873	673	10.999127	51
0.0650	9.008278	666	9.997732	7	9.010546	673	10.989454	0.9350
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.935.

Are.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Are.
0.0650	9.008278	666	9.997732	7	9.010546	672	10.989454	0.9350
51	8944	664	25	7	1218	672	8782	49
52	9.009608	663	18	7	1890	670	8110	48
53	9.010271	663	11	7	2560	669	7440	47
54	9034	661	9.997704	7	3229	668	6771	46
55	1955	660	9.997697	7	3897	668	6103	45
56	2255	659	90	7	4565	666	5435	44
57	2914	658	83	7	5231	665	4769	43
58	3372	657	76	7	5896	664	4104	42
59	4229	657	69	7	6560	664	3440	41
0.0660	4886	655	62	7	7224	662	2776	0.9340
61	5541	654	55	7	7886	661	2114	39
62	6195	653	48	7	8547	661	1453	38
63	6848	652	41	8	9208	659	0793	37
64	7500	651	33	7	9.019867	658	10.980133	36
65	8151	651	26	7	9.020525	658	10.979475	35
66	8802	649	19	7	1183	656	8818	34
67	9.019451	648	12	7	1839	655	8161	33
68	9.020099	647	9.997605	7	2494	655	7506	32
69	9746	647	9.997598	8	3149	653	6851	31
0.0670	1393	645	90	7	3802	653	6198	0.9330
71	2038	644	83	7	4455	651	5545	29
72	2682	644	76	7	5106	651	4894	28
73	3326	642	69	7	5757	650	4243	27
74	3968	642	62	8	6407	648	3593	26
75	4610	640	54	7	7055	648	2945	25
76	5250	640	47	7	7703	647	2297	24
77	5890	638	40	8	8350	646	1650	23
78	6528	638	32	7	8996	645	1004	22
79	7166	637	25	7	9.029641	644	10.970359	21
0.0680	7803	635	18	7	9.030285	643	10.969715	0.9320
81	8438	635	11	8	9028	642	9072	19
82	9073	634	9.997503	7	1370	641	8430	18
83	9.029707	633	9.997496	8	2211	641	7789	17
84	9.030340	632	88	7	2852	639	7148	16
85	9972	631	81	7	3491	639	6509	15
86	1603	630	74	8	4130	637	5871	14
87	2233	630	66	7	4767	637	5233	13
88	2863	628	59	7	5404	635	4596	12
89	3491	627	52	8	6039	635	3961	11
0.0690	4118	627	44	7	6674	634	3326	0.9310
91	4745	625	37	8	7308	633	2692	09
92	5370	625	29	7	7941	632	2059	08
93	5995	624	22	8	8573	632	1427	07
94	6619	623	14	7	9205	630	0796	06
95	7242	622	9.997407	8	9.039835	629	10.960165	05
96	7864	621	9.997399	7	9.040464	629	10.959536	04
97	8485	620	92	8	1093	628	8907	03
98	9105	619	84	7	1721	626	8280	02
0.0699	9.039724	618	77	7	2347	626	7653	01
0.0700	9.040342	618	9.997369	8	9.042973	626	10.957027	0.9300
Are.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Are.

0.070.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.0700	9.040342	618	9.997369	7	9.042973	625	10.957027	0.9300
01	0060	617		8	3598	624	6402	0.9299
02	1577	615		7	4222	624	5778	98
03	2192	613		8	4846	622	5155	97
04	2807	614		7	5468	621	4532	96
05	3421	613		8	6089	621	3911	95
06	4034	612		8	6710	620	3290	94
07	4646	612		7	7330	619	2670	93
08	5258	610		8	7949	618	2051	92
09	5868	610	9.997301	7	8567	617	1433	91
0.0710	6478	608	9.997294	8	9184	616	0816	0.9290
11	7086	608		8	9.049800	616	10.950200	89
12	7694	607		7	9.050416	615	10.949584	88
13	8301	606		8	1031	613	8969	87
14	8907	606		8	1644	613	8356	86
15	9.049513	604		8	2257	613	7743	85
16	9.050117	604		7	2870	611	7131	84
17	0721	602		8	3481	610	6519	83
18	1323	602		8	4091	610	5909	82
19	1925	601		7	4701	609	5299	81
0.0720	2526	600		8	5310	608	4690	0.9280
21	3126	600		8	5918	607	4082	79
22	3726	598	9.997201	8	6525	606	3475	78
23	4324	598	9.997193	8	7131	605	2869	77
24	4922	597		7	7736	605	2264	76
25	5519	596		8	8341	604	1659	75
26	6115	595		8	8945	603	1055	74
27	6710	594		8	9.059518	602	10.940432	73
28	7304	594		8	9.060150	602	10.939850	72
29	7898	593		7	0752	600	9249	71
0.0730	8491	592		8	1352	600	8618	0.9270
31	9083	591		8	1952	599	8048	69
32	9.059674	590		8	2551	598	7449	68
33	9.060264	589		8	3149	597	6851	67
34	0853	589	9.997107	8	3746	597	6254	66
35	1442	588	9.997099	8	4343	596	5657	65
36	2030	587		8	4939	595	5061	64
37	2617	586		8	5534	594	4466	63
38	3203	586		8	6128	593	3872	62
39	3789	584		8	6721	593	3279	61
0.0740	4373	584		8	7314	592	2686	0.9260
41	4957	583		8	7906	591	2094	59
42	5540	582		8	8497	590	1503	58
43	6122	582		8	9087	589	0913	57
44	6704	580		8	9.0696-6	589	10.930324	56
45	7284	580		8	9.070265	588	10.929735	55
46	7864	579		8	0853	587	0147	54
47	8443	579	9.997003	8	1440	586	8560	53
48	9022	577	9.996995	8	2026	586	7974	52
49	9.069599	577		8	2612	585	7388	51
0.0750	9.070176	577	9.996979	8	9.073197	585	10.926803	0.9250
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.925.

0.075.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.0750	9.070176	576	9.996979	8	9.073197	584	10.926803	0.9250
51	0752	575	71	8	3781	583	6219	49
52	1327	575	63	8	4364	583	5636	48
53	1902	573	55	8	4947	582	5053	47
54	2475	573	47	8	5529	581	4471	46
55	3048	572	39	8	6110	580	3890	45
56	3620	572	31	9	6690	579	3310	44
57	4192	570	22	8	7269	579	2731	43
58	4762	570	14	8	7848	578	2152	42
59	5332	569	9.996906	8	8426	578	1574	41
0.0760	5901	569	9.996898	8	9004	576	0997	0.9240
61	6470	567	90	8	9.079580	576	10.920420	39
62	7037	567	82	9	9.080156	575	10.919844	38
63	7604	566	73	8	0731	574	9269	37
64	8170	566	65	8	1305	574	8695	36
65	8736	564	57	8	1879	573	8121	35
66	9300	564	49	9	2452	572	7548	34
67	9.079864	563	40	8	3024	571	6976	33
68	9.080427	563	32	8	3595	571	6405	32
69	0900	561	24	8	4166	570	5834	31
0.0770	1551	561	16	9	4736	569	5264	0.9230
71	2112	560	9.996807	8	5305	568	4695	29
72	2672	560	9.996799	8	5873	568	4127	28
73	3232	558	91	9	6441	567	3559	27
74	3790	558	82	9	7008	566	2992	26
75	4348	558	74	8	7574	566	2426	25
76	4906	556	66	9	8140	565	1860	24
77	5462	556	57	8	8705	564	1295	23
78	6018	555	49	8	9269	564	0731	22
79	6573	554	41	9	9.089833	562	10.910168	21
0.0780	7127	554	32	9	9.090395	562	10.909605	0.9220
81	7681	553	24	9	0957	562	9043	19
82	8234	552	15	8	1519	560	8481	18
83	8786	552	9.996707	9	2079	560	7921	17
84	9338	550	9.996698	8	2639	560	7361	16
85	9.089888	551	90	8	3199	558	6802	15
86	9.090439	549	82	9	3757	558	6243	14
87	0988	549	73	8	4315	557	5685	13
88	1537	548	65	8	4872	557	5128	12
89	2085	547	56	9	5429	555	4572	11
0.0790	2632	546	48	8	5984	555	4016	0.9210
91	3178	546	39	9	6539	553	3461	09
92	3724	545	31	8	7094	553	2906	08
93	4269	545	22	9	7647	554	2353	07
94	4814	544	13	9	8201	552	1800	06
95	5358	543	9.996605	8	8753	552	1247	05
96	5901	542	9.996596	9	9305	551	0696	04
97	6443	542	88	8	9.099856	550	10.900145	03
98	6985	541	79	9	9.100406	549	10.899594	02
0.0799	7526	540	71	8	0955	549	9043	01
0.0800	9.098066	540	9.996562	9	9.101504	549	10.898496	0.9200
Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.020.

0.080.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.0800	9.098066	540	9.996562	9	9.101504	549	10.898496	0.9200
01	8606	539	53	9	2053	547	7947	0.9199
02	9145	538	45	8	2600	547	7400	98
03	9.099683	538	36	9	3147	547	6853	97
04	9.100221	537	27	8	3694	545	6307	96
05	0758	536	19	9	4239	545	5761	95
06	1294	536	10	9	4784	544	5216	94
07	1830	535	9.996501	8	5328	544	4672	93
08	2365	534	9.996493	9	5872	543	4128	92
09	2899	534	84	9	6415	542	3585	91
0.0810	3433	532	75	9	6957	542	3043	0.9190
11	3965	533	66	8	7499	541	2501	89
12	4498	531	58	9	8040	540	1960	88
13	5039	531	49	9	8580	540	1420	87
14	5560	531	40	9	9120	539	0880	86
15	6091	529	31	9	9.109659	539	10.890341	85
16	6620	529	23	8	9.110198	537	10.889802	84
17	7149	529	14	9	0735	538	9265	83
18	7678	527	9.996405	9	1273	536	8728	82
19	8205	527	9.996396	9	1807	536	8191	81
0.0820	8732	527	87	8	2345	535	7655	0.9180
21	9259	525	79	9	2880	535	7120	79
22	9.109784	525	70	9	3415	534	6585	78
23	9.110309	525	61	9	3949	533	6051	77
24	0834	524	52	9	4482	533	5518	76
25	1358	523	43	9	5015	532	4986	75
26	1881	522	34	9	5547	531	4453	74
27	2403	522	25	9	6078	531	3922	73
28	2925	521	16	9	6609	530	3391	72
29	3446	521	9.996307	9	7139	530	2861	71
0.0830	3967	520	9.996298	8	7669	528	2332	0.9170
31	4487	519	90	9	8197	529	1803	69
32	5006	519	81	9	8726	527	1274	68
33	5525	518	72	9	9253	527	0747	6-
34	6043	517	63	9	9.119780	527	10.880220	66
35	6560	517	54	9	9.120307	526	10.879693	65
36	7077	516	45	9	0833	525	9167	64
37	7593	516	36	9	1358	225	8642	63
38	8109	515	27	9	1883	523	8118	62
39	8624	514	18	9	2406	524	7594	61
0.0840	9138	514	9.996208	10	2930	523	7070	0.9160
41	9.119652	513	9.996199	9	3453	522	6547	59
42	9.120165	513	90	9	3975	521	6025	58
43	0678	511	81	9	4496	521	5504	57
44	1189	512	72	9	5017	521	4983	56
45	1701	510	63	9	5538	519	4462	55
46	2211	510	54	9	6057	520	3943	54
47	2721	510	45	9	6577	518	3424	53
48	3231	509	36	9	7095	518	2905	52
49	3740	508	27	9	7613	517	2387	51
0.0850	9.124248	508	9.996117	10	9.128130	517	10.871870	0.9150
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.915.

0.085.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.0850	9.124248	507	9.996117	9	9.128130	517	10.871870	0.9150
51	4755	507	9.996108	9	8647	516	1353	49
52	5262	507	9.996099	9	9163	516	0837	48
53	5760	505	90	9	9.129679	515	10.870321	47
54	6274	506	81	10	9.130194	514	10.869806	46
55	6780	504	71	9	0708	514	9292	45
56	7284	504	62	9	1222	513	8778	44
57	7788	504	53	9	1735	513	8265	43
58	8292	502	44	9	2248	512	7752	42
59	8794	503	35	10	2760	511	7240	41
0.0860	9297	501	25	9	3271	511	6729	0.9140
61	9.129798	501	16	9	3782	511	6218	39
62	9.130299	501	9.996007	10	4293	509	5707	38
63	0800	500	9.995997	9	4802	510	5198	37
64	1300	499	88	9	5312	508	4688	36
65	1799	499	79	10	5820	508	4180	35
66	2298	498	69	9	6328	508	3672	34
67	2796	497	60	9	6836	507	3164	33
68	3293	497	51	9	7343	506	2658	32
69	3790	497	41	10	7849	506	2151	31
0.0870	4287	495	32	9	8355	505	1645	0.9130
71	4782	496	23	10	8860	504	1140	29
72	5278	494	13	9	9364	504	0636	28
73	5772	494	9.995904	10	9.139868	504	10.860132	27
74	6266	494	9.995894	9	9.140372	503	10.859628	26
75	9.136760	493	85	10	0875	502	9125	25
76	7253	492	75	9	1377	502	8623	24
77	7745	492	66	9	1879	501	8121	23
78	8237	491	57	10	2380	501	7620	22
79	8728	491	47	9	2881	500	7119	21
0.0880	9219	490	38	10	3381	500	6619	0.9120
81	9.139709	489	28	9	3881	499	6119	19
82	9.140198	489	19	10	4380	498	5620	18
83	0687	489	9.995809	9	4878	498	5122	17
84	1176	487	9.995800	10	5376	498	4624	16
85	1663	488	90	10	5874	496	4127	15
86	2151	486	80	9	6370	497	3630	14
87	2637	487	71	10	6867	495	3133	13
88	3124	485	61	9	7362	496	2638	12
89	3609	485	52	10	7858	494	2143	11
0.0890	4094	485	42	9	8352	494	1648	0.9110
91	4579	484	33	10	8846	494	1154	09
92	5063	483	23	10	9340	493	0660	08
93	5546	483	13	9	9.149813	492	10.850167	07
94	6029	482	9.995704	10	9.150325	492	10.849675	06
95	6511	482	9.995694	10	0817	492	9183	05
96	6993	481	84	9	1309	491	8691	04
97	7474	481	75	10	1800	490	8200	03
98	7955	480	65	10	2290	490	7710	02
0.0899	8435	480	55	10	2780	489	7220	01
0.0900	9.148915		9.995646	9	9.153269		10.846731	0.9100
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.910.

0. 090.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.0900	9.148915	479	9.995646	10	9.153269	489	10.846731	0.9100
01	9394	478	36	10	3758	488	6242	0.9099
02	9.149872	478	26	10	4246	488	5754	98
03	9.150350	478	16	10	4734	487	5266	97
04	0838	477	9.995607	9	5221	487	4779	96
05	1305	476	9.995597	10	5708	486	4292	95
06	1781	476	87	10	6194	486	3806	94
07	2257	475	77	10	6680	485	3320	93
08	2732	475	68	9	7165	484	2835	92
09	3207	474	58	10	7649	484	2351	91
0.0910	3681	474	48	10	8133	484	1867	0.9090
11	4155	473	38	10	8617	483	1383	89
12	4628	473	28	10	9100	483	0900	88
13	5101	472	18	10	9.150583	482	10.840418	87
14	5573	472	9.995509	9	9.160065	481	10.839936	86
15	6045	471	9.995499	10	0546	481	9454	85
16	6516	470	89	10	1027	480	8973	84
17	6986	470	79	10	1507	480	8493	83
18	7456	470	69	10	1987	480	8013	82
19	7926	469	59	10	2467	479	7533	81
0.0920	8395	469	49	10	2946	478	7054	0.9080
21	8864	468	39	10	3424	478	6576	79
22	9332	467	29	10	3902	478	6098	78
23	9.159799	467	19	10	4380	477	5620	77
24	9.160266	466	9.995409	10	4857	476	5143	76
25	0732	466	9.995399	10	9.165333	476	10.834667	75
26	1198	466	89	10	5809	475	4191	74
27	1664	465	79	10	6284	475	3716	73
28	2129	464	69	10	6759	475	3241	72
29	2593	464	59	10	7234	474	2766	71
0.0930	3057	463	49	10	7708	473	2292	0.9070
31	3520	463	39	10	8181	473	1819	69
32	3983	463	29	10	8654	473	1346	68
33	4446	462	19	10	9127	472	0874	67
34	4908	461	9.995309	10	9.169599	471	10.830402	66
35	5369	461	9.995299	10	9.170070	471	10.829930	65
36	5830	460	89	10	0541	471	9459	64
37	6290	460	79	10	1012	470	8989	63
38	6750	460	69	10	1482	469	8519	62
39	7210	459	59	10	1951	469	8049	61
0.0940	7669	458	49	11	2420	469	7580	0.9060
41	8127	458	38	10	2889	468	7111	59
42	8585	457	28	10	3357	467	6643	58
43	9042	457	18	10	3824	467	6176	57
44	9499	457	9.995208	10	4291	467	5709	56
45	9.169956	456	9.995198	11	4758	466	5242	55
46	9.170412	455	87	10	5224	466	4776	54
47	0867	455	77	10	5690	465	4310	53
48	1322	455	67	10	6155	465	3845	52
49	1777	454	57	10	6620	464	3380	51
0.0950	9.172231	454	9.995146	11	9.177084		10.822916	0.9050
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0. 905.

0. 095.

Arc.	Tog. Fin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.0950	9.172231	453	9.995146	10	9.177084	464	10.822916	9.9050
51	2684	453	36	10	7548	463	2452	49
52	3137	453	26	10	8011	463	1989	48
53	3590	452	16	11	8474	462	1526	47
54	4042	451	9.995105	10	8936	462	1064	46
55	4493	451	9.995095	10	9398	462	0602	45
56	4944	451	85	10	9.179860	461	10.820140	44
57	5395	450	74	11	9.180321	460	10.819680	43
58	5845	450	64	10	0781	460	9219	42
59	6295	449	54	10	1241	460	8759	41
0.0960	6744	449	43	11	1701	459	8299	0.9040
61	7193	448	33	10	2160	458	7840	39
62	7641	448	23	10	2618	458	7382	38
63	8089	447	12	11	3077	457	6924	37
64	8536	447	9.995002	10	3534	457	6466	36
65	8983	446	9.994991	10	3991	457	6009	35
66	9429	446	81	10	4448	457	5552	34
67	9.179875	446	71	10	4905	455	5096	33
68	9.180321	444	60	11	5360	455	4640	32
69	0765	445	50	10	5816	455	4184	31
0.0970	1210	444	39	11	6271	454	3729	0.9030
71	1654	444	29	10	6725	454	3275	29
72	2098	443	18	11	7179	454	2821	28
73	2541	442	9.994908	10	7633	453	2367	27
74	2983	442	9.994897	10	8086	453	1914	26
75	9.183425	442	87	10	8539	452	1461	25
76	3867	441	76	10	8991	452	1009	24
77	4308	441	66	11	9443	451	0557	23
78	4749	441	55	11	9.189894	451	10.810106	22
79	5190	439	44	10	9.190345	451	10.809655	21
0.0980	5629	440	34	11	0794	450	9205	0.9020
81	6069	439	23	10	1246	449	8755	19
82	6508	438	13	11	1698	449	8305	18
83	6946	438	9.994802	10	2144	449	7856	17
84	7384	438	9.994791	10	2593	448	7407	16
85	7822	437	81	11	3041	448	6959	15
86	8259	437	70	10	3489	447	6511	14
87	8696	436	60	11	3936	447	6064	13
88	9132	436	49	11	4383	447	5617	12
89	9.189568	435	38	11	4830	446	5170	11
0.0990	9.190003	435	27	10	5276	445	4724	0.9010
91	0438	435	17	11	5721	446	4279	09
92	0873	434	9.994706	10	6167	446	3833	08
93	1307	433	9.994695	10	6611	445	3389	07
94	1740	433	85	11	7056	445	2944	06
95	2173	433	74	11	7500	444	2500	05
96	2606	432	63	11	7947	443	2057	04
97	3038	432	52	10	8386	443	1614	03
98	3470	432	42	11	8829	442	1171	02
0.0999	3902	430	31	11	9271	442	0729	01
0.1000	9.194332	430	9.994620	11	9.199713	442	10.800288	0.9000
Arc.	Log. Sin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0. 900.

O. 100.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.1000	9.194332	431	9.994620	11	9.199713	441	10.800288	0.9000
01	4763	430	9.994609	11	9.200154	441	10.799846	0.8999
02	5193	430	9.994598	10	0595	440	9405	98
03	5623	429	88	11	1035	440	8965	97
04	6052	429	77	11	1475	440	8525	96
05	6481	428	66	11	1915	439	8085	95
06	6909	428	55	11	2354	439	7646	94
07	7337	427	44	11	2793	438	7207	93
08	7764	427	33	11	3231	438	6769	92
09	8191	427	22	11	3669	438	6331	91
0.1010	8618	426	11	11	4107	437	5894	0.8990
11	9044	426	9.994500	10	4544	436	5456	89
12	9470	425	9.994490	11	4980	437	5020	88
13	9.199895	425	79	11	5417	435	4584	87
14	9.200320	424	68	11	5852	436	4148	86
15	0744	424	57	11	6288	435	3712	85
16	1168	424	46	11	6723	434	3277	84
17	1592	423	35	11	7157	435	2843	83
18	2015	423	24	11	7592	433	2408	82
19	2438	422	13	11	8025	434	1975	81
0.1020	2860	422	9.994402	11	8459	433	1541	0.8980
21	3282	422	9.994391	11	8892	432	1108	79
22	3704	421	80	11	9324	432	0676	78
23	4125	421	69	12	9.209756	432	10.790244	77
24	4546	420	57	11	9.210188	431	10.789812	76
25	9.204966	420	46	11	0619	431	9381	75
26	5386	419	35	11	1050	431	8950	74
27	5805	419	24	11	1481	430	8519	73
28	6224	419	13	11	1911	430	8089	72
29	6643	418	9.994302	11	2341	429	7659	71
0.1030	7061	418	9.994291	11	2770	429	7230	0.8970
31	7479	417	80	11	3199	428	6801	69
32	7896	417	69	12	3627	428	6373	68
33	8313	416	57	11	4055	428	5945	67
34	8729	416	46	11	4483	427	5517	66
35	9145	416	35	11	4910	427	5090	65
36	9561	415	24	11	5337	427	4663	64
37	9.209976	415	13	12	5764	426	4236	63
38	9.210391	415	9.994201	11	6190	426	3810	62
39	0806	414	9.994190	11	6616	425	3385	61
0.1040	1220	414	79	11	7041	425	2959	0.8960
41	1634	413	68	12	7466	424	2534	59
42	2047	413	56	11	7890	424	2110	58
43	2460	412	45	11	8314	424	1686	57
44	2872	412	34	11	8738	424	1262	56
45	3284	412	23	12	9162	423	0839	55
46	3696	411	11	11	9.219585	422	10.780416	54
47	4107	411	9.994100	11	9.220007	422	10.779993	53
48	4518	410	9.994089	12	0429	422	9571	52
49	4928	410	77	11	0851	421	9149	51
0.1050	9.215338	410	9.994066	11	9.221272	421	10.778728	0.8950
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

O. 895.

O. 105.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.1050	9.215338	410	9.994066	11	9.221272	421	10.778728	0.8950
51	5748	409	55	11	1693	421	8307	49
52	6157	409	43	12	2114	420	7886	48
53	6566	409	32	11	2534	420	7466	47
54	6975	408	20	12	2954	420	7046	46
55	7383	407	9.994009	11	3374	419	6626	45
56	7790	408	9.993998	12	3795	419	6207	44
57	8198	407	86	11	4212	418	5789	43
58	8605	406	75	12	4636	418	5370	42
59	9011	406	63	11	5048	417	4952	41
0.1060	9417	406	52	12	5465	418	4535	0.8940
61	9.219823	405	40	11	5883	416	4118	39
62	9.220228	405	29	12	6299	417	3701	38
63	0633	405	17	11	6716	416	3284	37
64	1038	404	9.993906	11	7132	416	2868	36
65	1442	404	9.993894	12	7548	415	2453	35
66	1846	403	83	11	7963	415	2037	34
67	2249	403	71	12	8378	414	1622	33
68	2652	403	60	11	8792	415	1208	32
69	3055	402	48	12	9207	413	0794	31
0.1070	3457	402	37	11	9.229620	414	10.770380	0.8930
71	3859	401	25	12	9.230034	413	10.769966	29
72	4260	401	14	11	0447	413	9553	28
73	4661	401	9.993802	12	0860	412	9141	27
74	5062	401	9.993790	11	1272	412	8728	26
75	9.225463	399	79	12	9.231684	411	10.768316	25
76	5802	400	67	11	2095	412	7905	24
77	6262	399	55	12	2507	411	7493	23
78	6661	399	44	11	2918	410	7083	22
79	7060	399	32	12	3328	410	6672	21
0.1080	7459	398	20	11	3738	410	6262	0.8920
81	7857	397	9.993709	12	4148	409	5852	19
82	8254	398	9.993697	11	4557	409	5443	18
83	8652	397	85	12	4966	409	5034	17
84	9049	396	74	11	5375	408	4625	16
85	9445	396	62	12	5783	408	4217	15
86	9.229841	396	50	11	6191	408	3809	14
87	9.230237	396	38	12	6599	407	3401	13
88	0633	395	27	11	7006	407	2994	12
89	1028	394	15	12	7413	407	2587	11
0.1090	1422	395	9.993603	12	7820	406	2181	0.8910
91	1817	394	9.993591	11	8226	405	1774	09
92	2211	393	79	12	8631	406	1369	08
93	2604	394	68	11	9037	405	0963	07
94	2998	393	56	12	9442	405	0558	06
95	3391	392	44	11	9.239847	404	10.760153	05
96	3783	392	32	12	9.240251	404	10.759749	04
97	4175	392	20	11	0655	404	9343	03
98	4567	391	9.993508	12	1059	403	8941	02
0.1099	4958	391	9.993496	11	1462	403	8538	01
0.1100	9.235349	391	9.993484	12	9.241865	403	10.758135	0.8900
Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.

O. 110.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.1100	9.235349	391	9.993484	11	9.241865	403	10.758135	0.8900
01	5740	390	73	12	2268	402	7732	0.8899
02	6130	390	61	12	2670	402	7330	98
03	6520	390	49	12	3072	401	6928	97
04	6910	389	37	12	3473	402	6527	96
05	7299	389	25	12	3875	400	6126	95
06	7688	389	13	12	4275	401	5725	94
07	8077	388	9.993401	12	4676	400	5324	93
08	8465	388	9.993389	12	5076	400	4924	92
09	8853	387	77	12	5476	399	4524	91
0.1110	9240	387	65	12	5875	399	4125	0.8890
11	9.239627	387	53	12	6274	399	3726	89
12	9.240014	386	41	12	6673	399	3327	88
13	0400	386	29	12	7072	398	2928	87
14	0786	386	17	12	7470	398	2530	86
15	1172	385	9.993305	12	7868	397	2133	85
16	1557	385	9.993293	13	8265	397	1735	84
17	1942	385	80	12	8662	397	1338	83
18	2327	384	68	12	9059	396	0941	82
19	2711	384	56	12	9455	396	0545	81
0.1120	3095	384	44	12	9.249851	396	10.750149	0.8880
21	3479	383	32	12	9.250247	395	10.749753	79
22	3862	383	20	12	0642	395	9358	78
23	4245	383	9.993208	12	1037	395	8963	77
24	4628	382	9.993196	13	1432	394	8568	76
25	9.245010	382	83	12	1826	394	8174	75
26	5392	381	71	12	2220	394	7780	74
27	5773	381	59	12	2614	393	7386	73
28	6154	381	47	12	3007	394	6993	72
29	6535	380	35	13	3401	392	6600	71
0.1130	6915	381	22	12	3793	393	6207	0.8870
31	7296	379	9.993110	12	4186	392	5815	69
32	7675	380	9.993098	12	4578	391	5423	68
33	8055	379	86	12	4969	392	5031	67
34	8434	379	73	13	5361	391	4639	66
35	8813	378	61	12	5752	390	4248	65
36	9191	378	49	13	6142	391	3858	64
37	9569	378	36	12	6533	390	3467	63
38	9.249947	377	24	12	6923	390	3077	62
39	9.250324	377	9.993022	13	7313	389	2688	61
0.1140	0701	377	9.992999	12	7702	389	2298	0.8860
41	1078	376	87	12	8091	389	1909	59
42	1454	376	75	13	8480	388	1520	58
43	1830	376	62	12	8868	388	1132	57
44	2206	375	50	12	9256	388	0744	56
45	2581	375	38	13	9.259644	387	10.740356	55
46	2956	375	25	12	9.260031	388	10.739969	54
47	3331	375	13	13	0419	386	9582	53
48	3706	374	9.992900	12	0805	387	9195	52
49	4080	373	9.992888	13	1192	386	8808	51
0.1150	9.254453	373	9.992875	12	9.261578	386	10.738422	0.8850
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.115.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.1150	9.254453	374	9.992875	12	9.261578	386	10.738422	0.8850
51	4827	373	63	13	1964	385	8036	49
52	5200	372	50	12	2349	385	7651	48
53	5572	373	38	12	2734	385	7266	47
54	5945	372	25	13	3119	385	6881	46
55	6317	371	13	13	3504	384	6496	45
56	6688	372	9.992800	12	3888	384	6112	44
57	7060	371	9.992788	13	4272	384	5728	43
58	7431	371	75	12	4656	383	5344	42
59	7802	370	63	13	5039	383	4961	41
0.1160	8172	370	50	12	5422	383	4578	0.8840
61	8542	370	38	12	5805	382	4196	39
62	8912	369	25	13	6187	382	3813	38
63	9281	369	9.992712	12	6569	382	3431	37
64	9.259650	369	9.992700	13	6951	381	3049	36
65	9.260019	369	9.992687	12	7332	381	2668	35
66	0388	368	75	13	7713	381	2287	34
67	0756	368	62	13	8094	380	1906	33
68	1124	367	49	12	8474	380	1526	32
69	1491	367	37	13	8854	380	1146	31
0.1170	1858	367	24	13	9234	380	0766	0.8830
71	2225	367	9.992611	12	9614	379	0386	29
72	2592	366	9.992599	13	9.269993	379	10.730007	28
73	2958	366	86	13	9.270372	379	10.729628	27
74	3324	365	73	13	0751	378	9250	26
75	9.263689	365	60	12	1129	378	8871	25
76	4054	365	48	13	1507	378	8493	24
77	4419	365	35	13	1885	378	8116	23
78	4784	364	22	13	2262	377	7738	22
79	5148	364	9.992509	12	2639	377	7361	21
0.1180	5512	364	9.992497	13	3016	377	6984	0.8820
81	5876	363	84	13	3392	376	6608	19
82	6239	363	71	13	3768	376	6232	18
83	6602	363	58	13	4144	376	5856	17
84	6965	362	45	12	4520	375	5480	16
85	7327	363	33	13	4895	375	5105	15
86	7690	361	20	13	5270	375	4730	14
87	8051	362	9.992407	13	5645	374	4355	13
88	8413	361	9.992394	13	6019	374	3981	12
89	8774	361	81	13	6393	374	3607	11
0.1190	9135	361	68	13	6767	373	3233	0.8810
91	9495	361	55	13	7140	373	2860	09
92	9.269856	360	42	13	7513	373	2487	08
93	9.270216	359	29	13	7886	373	2114	07
94	0575	359	16	13	8259	372	1741	06
95	0934	359	9.992303	12	8631	372	1369	05
96	1293	357	9.992291	13	9003	372	0997	04
97	1652	358	78	13	9375	371	0625	03
98	2010	359	65	13	9.279746	371	10.720254	02
0.1199	2369	357	52	13	9.280117	371	10.719883	01
0.1200	9.272726	357	9.992239	13	9.280488	371	10.719512	0.8800
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.1200	9.272726	358	9.992239	13	9.280488	370	10.719512	0.8800
01	3084	357	226	13	0858	370	9142	0.8799
02	3441	357	213	13	1228	370	8772	98
03	3798	356	199	14	1598	370	8402	97
04	4154	357	186	13	1968	369	8032	96
05	4511	356	173	13	2337	369	7663	95
06	4867	355	160	13	2706	369	7294	94
07	5222	356	147	13	3075	368	6925	93
08	5578	355	134	13	3443	369	6557	92
09	5933	354	121	13	3812	367	6188	91
0.1210	6287	355	108	13	4179	368	5821	0.8790
11	6642	354	095	13	4547	367	5453	89
12	6996	354	082	14	4914	367	5086	88
13	7350	353	068	13	5281	367	4719	87
14	7703	354	055	13	5648	366	4352	86
15	8057	352	042	13	6014	367	3986	85
16	8409	353	029	13	6381	365	3620	84
17	8762	352	016	13	6746	366	3254	83
18	9114	353	9.992003	14	7112	365	2888	82
19	9467	351	9.991989	13	7477	365	2523	81
0.1220	9.279818	352	976	13	7842	365	2158	0.8780
21	9.280170	351	963	13	8207	364	1793	79
22	0521	351	950	13	8571	365	1429	78
23	0872	350	936	14	8936	363	1065	77
24	1222	351	923	13	9299	364	0701	76
25	1573	350	9.991910	14	9.289663	363	10.710337	75
26	1923	349	896	13	9.290026	363	10.709974	74
27	2272	350	883	13	0389	363	9611	73
28	2622	349	870	14	0752	362	9248	72
29	2971	349	856	13	1114	363	8886	71
0.1230	3320	348	843	13	1477	361	8524	0.8770
31	3668	348	830	14	1838	362	8162	69
32	4016	348	816	13	2200	361	7800	68
33	4364	348	803	13	2561	361	7439	67
34	4712	347	790	14	2922	361	7078	66
35	5059	348	776	13	3283	361	6717	65
36	5407	346	763	14	3644	360	6356	64
37	5753	347	749	13	4004	360	5996	63
38	6100	346	736	13	4364	360	5636	62
39	6446	346	723	14	4724	359	5277	61
0.1240	6792	346	709	13	5083	359	4917	0.8760
41	7138	345	696	14	5442	359	4558	59
42	7483	345	682	13	5801	358	4199	58
43	7828	345	669	14	6159	359	3841	57
44	8173	344	655	13	6518	358	3482	56
45	8517	345	642	14	6876	358	3124	55
46	8862	344	628	13	7234	357	2767	54
47	9206	343	615	14	7591	357	2409	53
48	9549	344	601	13	7948	357	2052	52
49	9.289893	343	588	13	8305	357	1695	51
0.1250	9.290236	343	9.991574	14	9.298662	357	10.701338	0.8750
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

O. 125.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.1250	9.290236	343	9.991574	14	9.298662	356	10.701338	0.8750
51	0579	342	560	13	9018	356	0982	49
52	0921	342	547	14	9374	356	0626	48
53	1263	342	533	13	9.299730	356	10.700270	47
54	1605	342	520	14	9.300086	355	10.699914	46
55	1947	341	506	14	0441	355	9559	45
56	2288	342	492	13	0796	355	9204	44
57	2630	340	479	14	1151	354	8849	43
58	2970	341	465	14	1505	353	8495	42
59	3311	340	451	13	1860	354	8140	41
0.1260	3651	340	438	14	2214	353	7786	0.8740
61	3991	340	424	14	2567	354	7433	39
62	4331	340	410	13	2921	353	7079	38
63	4671	339	397	14	3274	353	6726	37
64	5010	339	383	14	3627	353	6373	36
65	5349	338	369	14	3980	352	6021	35
66	5687	339	355	13	4332	352	5668	34
67	6026	338	342	14	4684	352	5316	33
68	6364	338	328	14	5036	352	4964	32
69	6702	337	314	14	5388	351	4613	31
0.1270	7039	338	300	13	5739	351	4261	0.8730
71	7377	337	287	14	6090	351	3910	29
72	7714	336	273	14	6441	350	3559	28
73	8050	337	259	14	6791	351	3209	27
74	8387	336	245	14	7142	350	2858	26
75	9.298723	336	9.991231	14	9.307492	349	10.692508	25
76	9059	335	217	13	7841	350	25159	24
77	9394	336	204	14	8191	349	1809	23
78	9.299730	335	190	14	8540	349	1460	22
79	9.300065	335	176	14	8889	349	1111	21
0.1280	0400	334	162	14	9238	348	0762	0.8720
81	0734	335	148	14	9586	349	0414	19
82	1069	334	134	14	9.309935	348	10.690065	18
83	1403	334	120	14	9.310283	347	10.689717	17
84	1737	333	106	14	0630	348	9370	16
85	2070	333	092	14	0978	347	9022	15
86	2403	333	078	14	1325	347	8675	14
87	2736	333	064	14	1672	347	8328	13
88	3069	332	050	14	2019	346	7981	12
89	3401	333	036	14	2365	346	7635	11
0.1290	3734	331	022	14	2711	346	7289	0.8710
91	4065	332	9.991008	14	3057	346	6943	09
92	4397	331	9.990994	14	3403	345	6597	08
93	4728	332	980	14	3748	346	6252	07
94	5060	330	966	14	4094	344	5907	06
95	5390	331	952	14	4438	345	5562	05
96	5721	330	938	14	4783	345	5217	04
97	6051	330	924	14	5128	344	4873	03
98	6381	330	910	14	5472	344	4528	02
0.1299	6711	330	896	14	5816	343	4184	01
0.1300	9.307041	330	9.990882	14	9.316159	343	10.683841	0.8700
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

O. 870.

0.130.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.1300	9.307041	329	9.990882	15	9.316159	344	10.683841	0.8700
01	7370	329	867	14	6503	343	3497	0.8699
02	7609	329	853	14	6846	343	3154	98
03	8028	328	839	14	7189	342	2811	97
04	8356	329	825	14	7531	343	2469	96
05	8685	328	811	14	7874	342	2176	95
06	9013	327	797	15	8216	342	1784	94
07	9340	328	782	14	8558	342	1442	93
08	9668	327	768	14	8900	341	1100	92
09	9.30995	327	754	14	9241	341	0759	91
0.1310	9.310322	327	740	14	9582	341	0418	0.8690
11	0649	326	725	14	9.319923	341	10.680077	89
12	0975	326	711	14	9.320264	340	10.679736	88
13	1301	326	697	14	0604	341	9196	87
14	1627	326	683	15	0945	340	9055	86
15	1953	325	668	14	1285	339	8716	85
16	2278	326	654	14	1624	340	8376	84
17	2604	324	640	15	1964	339	8036	83
18	2928	325	625	14	2303	339	7697	82
19	3253	325	611	14	2642	339	7358	81
0.1320	3578	324	597	15	2981	338	7019	0.8680
21	3902	324	582	14	3319	339	6681	79
22	4226	323	568	14	3658	338	6343	78
23	4549	324	554	15	3996	337	6004	77
24	4873	323	539	14	4333	338	5667	76
25	9.315196	323	9.990525	15	9.324671	337	10.675329	75
26	5519	322	510	14	5008	337	4992	74
27	5841	323	496	14	5345	337	4655	73
28	6164	322	482	15	5682	337	4318	72
29	6486	322	467	14	6019	336	3981	71
0.1330	6808	321	453	15	6355	336	3645	0.8670
31	7129	322	438	14	6691	336	3309	69
32	7451	321	424	15	7027	336	2973	68
33	7772	321	409	14	7363	335	2637	67
34	8093	321	395	15	7698	335	2302	66
35	8414	320	380	14	8033	335	1967	65
36	8734	320	366	15	8368	335	1632	64
37	9054	320	351	14	8703	334	1297	63
38	9374	320	337	15	9037	335	0963	62
39	9.319694	319	322	14	9372	334	0628	61
0.1340	9.320013	319	308	15	9.329706	333	10.670294	0.8660
41	0332	319	293	15	9.330039	334	10.669961	59
42	0651	319	278	14	0373	333	9627	58
43	0970	318	264	15	0706	333	9294	57
44	1288	319	249	14	1039	333	8961	56
45	1607	317	235	15	1372	333	8628	55
46	1924	318	220	15	1705	332	8295	54
47	2242	318	205	14	2037	332	7963	53
48	2560	317	191	15	2369	332	7631	52
49	2877	317	176	15	2701	332	7299	51
0.1350	9.323194	317	9.990161	15	9.333033	332	10.666917	0.8650
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

o. 135.

Are.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Are.
o. 1350	9.323194	317	9.990161	14	9.333033	331	10.666967	o. 8650
51	3511	316	147	15	3364	331	6636	49
52	3827	316	132	15	3695	331	6305	48
53	4143	316	117	15	4026	331	5974	47
54	4459	316	102	14	4357	331	5643	46
55	4775	316	088	15	4688	330	5313	45
56	5091	315	073	15	5018	330	4982	44
57	5406	315	058	15	5348	330	4652	43
58	5721	315	043	14	5678	329	4322	42
59	6036	314	029	15	6007	330	3993	41
o. 1360	6350	315	9.990014	15	6337	329	3663	o. 8640
61	6665	314	9.989999	15	6666	329	3334	39
62	6979	314	984	15	6995	329	3005	38
63	7293	313	969	15	7324	328	2677	37
64	7606	314	954	14	7652	328	2348	36
65	7920	313	940	15	7980	328	2020	35
66	8233	313	925	15	8308	328	1692	34
67	8546	313	910	15	8636	328	1364	33
68	8859	312	895	15	8964	327	1037	32
69	9171	312	880	15	9291	327	0709	31
o. 1370	9483	312	865	15	9618	327	0382	o. 8630
71	9.329795	312	850	15	9.339945	327	10.660055	29
72	9.330107	311	835	15	9.340272	326	10.659728	28
73	0418	312	820	15	0598	326	9402	27
74	0730	311	805	14	0924	326	9076	26
75	1041	311	9.989791	15	1250	326	8750	25
76	1352	310	776	15	1576	326	8424	24
77	1662	310	761	15	1902	325	8098	23
78	1972	311	746	15	2227	325	7773	22
79	2283	309	731	15	2552	325	7448	21
o. 1380	2592	310	716	15	2877	325	7123	o. 8620
81	2902	310	701	16	3202	324	6798	19
82	3212	309	685	15	3526	324	6474	18
83	3521	309	670	15	3850	324	6150	17
84	3830	308	655	15	4174	324	5826	16
85	4138	309	640	15	4498	324	5502	15
86	4447	308	625	15	4822	323	5178	14
87	4755	308	610	15	5145	323	4855	13
88	5063	308	595	15	5468	323	4532	12
89	5371	308	580	15	5791	323	4209	11
o. 1390	5679	307	565	15	6114	323	3886	o. 8610
91	5986	307	550	16	6436	323	3564	09
92	6293	307	534	15	6759	322	3241	08
93	6600	307	519	15	7081	322	2919	07
94	6907	306	504	15	7403	321	2598	06
95	7213	306	489	15	7724	322	2276	05
96	7519	306	474	15	8046	321	1955	04
97	7825	306	459	16	8367	321	1633	03
98	8131	306	443	15	8688	320	1312	02
o. 1399	8437	305	428	15	9008	321	0992	01
o. 1400	9.338742	305	9.989413	15	9.349329	321	10.650671	o. 8600
Are.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Are.

o. 860.

0.140.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.1400	9.338742	305	9.989413	15	9.349329	320	10.650671	0.86000
01	9047	305	398	15	9649	320	0351	0.85999
02	9352	304	382	15	9.349969	320	10.650031	98
03	9656	305	367	15	9.350289	320	10.649711	97
04	9.339961	304	352	15	0609	320	9391	96
05	9.340265	304	336	15	0929	320	9072	95
06	0569	304	321	15	1248	319	8752	94
07	0873	303	306	15	1567	319	8433	93
08	1176	303	290	15	1886	318	8114	92
09	1479	304	275	15	2204	319	7796	91
0.1410	1783	302	260	15	2523	318	7477	0.85900
11	2085	303	244	15	2841	318	7159	89
12	2388	302	229	15	3159	318	6841	88
13	2690	303	214	15	3477	317	6523	87
14	2993	302	198	15	3794	318	6206	86
15	3295	301	183	15	4112	317	5888	85
16	3596	302	167	15	4429	317	5571	84
17	3898	301	152	15	4746	317	5254	83
18	4199	301	137	15	5063	316	4937	82
19	4500	301	121	15	5379	317	4621	81
0.1420	4801	301	106	15	5696	316	4305	0.85800
21	5102	300	090	15	6012	316	3988	79
22	5402	300	075	15	6328	315	3673	78
23	5702	300	059	15	6643	316	3357	77
24	6002	300	044	15	6959	315	3041	76
25	9.346302	300	028	15	9.357274	315	10.642726	75
26	6602	299	9.989013	16	7589	315	2411	74
27	6901	299	9.988997	16	7904	315	2096	73
28	7200	299	981	15	8219	314	1781	72
29	7499	299	966	15	8533	314	1467	71
0.1430	7798	299	950	15	8847	314	1153	0.85700
31	8096	298	935	15	9161	314	0839	69
32	8394	298	919	15	9475	314	0525	68
33	8692	298	903	15	9.359789	313	10.640211	67
34	8990	298	888	15	9.360102	314	10.639898	66
35	9288	297	872	15	0416	313	9584	65
36	9585	297	857	15	0729	313	9271	64
37	9.349882	297	841	15	1042	312	8959	63
38	9.350179	297	825	15	1354	313	8646	62
39	0476	297	810	15	1667	312	8333	61
0.1440	0773	297	794	15	1979	312	8021	0.85600
41	1069	296	778	15	2291	312	7709	59
42	1365	296	762	15	2603	311	7397	58
43	1661	296	747	15	2914	312	7086	57
44	1957	295	731	15	3226	311	6774	56
45	2252	295	715	15	3537	311	6463	55
46	2547	296	699	15	3848	311	6152	54
47	2843	294	684	15	4159	311	5841	53
48	3137	295	668	15	4470	310	5531	52
49	3432	294	652	15	4780	310	5220	51
0.1450	9.353726	294	9.988636	16	9.365090	310	10.634910	0.85500
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.855.

Q. 145.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.1450	9.353726	295	9.988636	16	9.365090	310	10.634910	0.8550
51	4021	294	620	15	5400	310	4600	49
52	4315	293	605	16	5710	310	4290	48
53	4608	294	589	16	6020	309	3980	47
54	4902	293	573	16	6329	309	3671	46
55	5195	294	557	16	6638	309	3362	45
56	5489	293	541	16	6947	309	3053	44
57	5782	292	525	16	7256	309	2744	43
58	6074	293	509	15	7565	308	2435	42
59	6367	292	494	16	7873	309	2127	41
0.1460	6659	292	478	16	8182	308	1819	0.8540
61	6951	292	462	16	8490	307	1510	39
62	7243	292	446	16	8797	308	1203	38
63	7535	291	430	16	9105	308	0895	37
64	7826	292	414	16	9413	307	0587	36
65	8118	291	398	16	9.369720	307	10.630280	35
66	8409	291	382	16	9.370027	307	10.629973	34
67	8700	290	366	16	0334	307	9666	33
68	8990	291	350	16	0641	306	9360	32
69	9281	290	334	16	0947	306	9053	31
0.1470	9571	290	318	16	1253	306	8747	0.8530
71	9.359861	290	302	16	1559	306	8441	29
72	9.360151	290	286	16	1865	306	8135	28
73	0441	289	270	16	2171	306	7829	27
74	0730	289	254	16	2477	305	7523	26
75	1019	289	9.988237	17	9.372782	305	10.627218	25
76	1308	289	221	16	3087	305	6913	24
77	1597	289	205	16	3392	305	6608	23
78	1886	288	189	16	3697	304	6303	22
79	2174	289	173	16	4001	305	5999	21
0.1480	2463	288	157	16	4306	304	5694	0.8520
81	2751	287	141	16	4610	304	5390	19
82	3038	288	125	17	4914	304	5086	18
83	3326	288	108	16	5218	303	4782	17
84	3614	287	092	16	5521	304	4479	16
85	3901	287	076	16	5825	303	4175	15
86	4188	287	060	16	6128	303	3872	14
87	4475	286	044	17	6431	303	3569	13
88	4761	287	027	16	6734	303	3266	12
89	5048	286	9.988011	16	7037	302	2963	11
0.1490	5334	286	9.987995	16	7339	302	2661	0.8510
91	5620	286	979	17	7641	303	2359	09
92	5906	285	962	16	7944	302	2057	08
93	6191	286	946	16	8246	301	1755	07
94	6477	285	930	17	8547	302	1453	06
95	6762	285	913	16	8849	301	1151	05
96	7047	285	897	16	9150	301	0850	04
97	7332	285	881	17	9451	301	0549	03
98	7617	284	864	16	9.379752	301	10.620248	02
0.1499	7901	284	848	16	9.380053	301	10.619947	01
0.1500	9.368185	284	9.987832	16	9.380354	301	10.619646	0.8500
Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.

Q. 850.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.1500	9.368185	284	9.987832	17	9.380354	300	10.619646	0.8500
01	8469	284	815	16	0654	300	9346	0.8499
02	8753	284	799	17	0954	301	9046	98
03	9037	283	782	16	1255	299	8746	97
04	9320	284	766	16	1554	300	8446	96
05	9604	283	750	17	1854	300	8146	95
06	9.369887	283	733	16	2154	299	7846	94
07	9.370170	282	717	17	2453	299	7547	93
08	0452	283	700	16	2752	299	7248	92
09	0735	282	684	17	3051	299	6949	91
0.1510	1017	282	667	16	3350	298	6650	0.8490
11	1209	282	651	17	3648	299	6352	89
12	1581	282	634	16	3947	298	6053	88
13	1863	281	618	17	4245	298	5755	87
14	2144	282	601	16	4543	298	5457	86
15	2426	281	585	17	4841	298	5159	85
16	2707	281	568	16	5139	297	4861	84
17	2988	280	552	17	5436	298	4564	83
18	3268	281	535	17	5734	297	4267	82
19	3549	280	518	16	6031	297	3969	81
0.1520	3829	281	502	17	6328	296	3672	0.8480
21	4110	280	485	16	6624	297	3376	79
22	4390	279	469	17	6921	296	3079	78
23	4669	280	452	17	7217	297	2783	77
24	4949	279	435	16	7514	296	2486	76
25	9.375228	280	9.987419	17	9.387810	296	10.612190	75
26	5508	279	402	17	8106	295	1894	74
27	5787	278	385	16	8401	296	1599	73
28	6065	279	369	17	8697	295	1303	72
29	6344	279	352	17	8992	295	1008	71
0.1530	6623	278	335	17	9287	295	0713	0.8470
31	6901	278	318	16	9582	295	0418	69
32	7179	278	302	17	9.389877	295	10.610123	68
33	7457	277	285	17	9.390172	294	10.609828	67
34	7734	278	268	17	0406	295	9534	66
35	8012	277	251	16	0761	294	9239	65
36	8289	277	235	17	1055	294	8945	64
37	8566	277	218	17	1349	293	8651	63
38	8843	277	201	17	1642	294	8358	62
39	9120	277	184	17	1936	293	8064	61
0.1540	9397	276	167	16	2229	294	7771	0.8460
41	9673	276	151	17	2523	293	7477	59
42	9.379949	276	134	17	2816	293	7184	58
43	9.380225	276	117	17	3109	292	6891	57
44	0501	276	100	17	3401	293	6599	56
45	0777	275	083	17	3694	292	6306	55
46	1052	276	066	17	3986	292	6014	54
47	1328	275	049	17	4278	292	5722	53
48	1603	275	032	17	4570	292	5430	52
49	1878	274	9.987015	17	4862	292	5138	51
0.1550	9.382152	274	9.986998	17	9.395154	292	10.604846	0.8450
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.1550	9.382152	275	9.986998	16	9.395154	291	10.604846	0.8450
51	2427	274	982	17	5445	292	4555	49
52	2701	274	965	17	5737	291	4263	48
53	2975	274	948	17	6028	291	3972	47
54	3249	274	931	17	6319	291	3681	46
55	3523	274	914	17	6610	290	3390	45
56	3797	273	897	17	6900	291	3100	44
57	4070	274	880	17	7191	290	2809	43
58	4344	273	863	17	7481	290	2519	42
59	4617	272	846	18	7771	290	2229	41
0.1560	4889	273	828	17	8061	290	1939	0.8440
61	5162	273	811	17	8351	289	1649	39
62	5435	272	794	17	8640	290	1360	38
63	5707	272	777	17	8930	289	1070	37
64	5979	272	760	17	9219	289	0781	36
65	6251	272	743	17	9508	289	0492	35
66	6523	272	726	17	9797	289	10.600203	34
67	6795	271	709	17	9400086	288	10.599914	33
68	7066	271	692	18	0374	289	9626	32
69	7337	271	674	17	0663	288	9337	31
0.1570	7608	271	657	17	0951	288	9049	0.8430
71	7879	271	640	17	1239	288	8761	29
72	8150	271	623	17	1527	288	8473	28
73	8421	270	606	17	1815	287	8185	27
74	8691	270	589	18	2102	288	7898	26
75	8961	270	571	17	9.402390	287	10.597610	25
76	9231	270	554	17	2677	287	7323	24
77	9501	270	537	17	2964	287	7036	23
78	9.389771	269	520	18	3251	287	6749	22
79	9.390040	269	502	17	3538	286	6462	21
0.1580	0309	269	485	17	3824	287	6176	0.8420
81	0578	269	468	18	4111	286	5889	19
82	0847	269	450	17	4397	286	5603	18
83	1116	269	433	17	4683	286	5317	17
84	1385	268	416	18	4969	286	5031	16
85	1653	268	398	17	5255	285	4745	15
86	1921	268	381	17	5540	286	4460	14
87	2189	268	364	18	5826	285	4174	13
88	2457	268	346	17	6111	285	3889	12
89	2725	268	329	17	6396	285	3604	11
0.1590	2993	267	312	18	6681	285	3319	0.8410
91	3260	267	294	17	6966	284	3034	09
92	3527	267	277	18	7250	285	2750	08
93	3794	267	259	17	7535	284	2465	07
94	4061	267	242	18	7819	284	2181	06
95	4328	266	224	17	8103	284	1897	05
96	4594	266	207	18	8387	284	1613	04
97	4860	266	189	17	8671	284	1329	03
98	5126	266	172	18	8955	283	1046	02
0.1599	5392	266	154	17	9238	283	0762	01
0.1600	9.395638	266	9.986137	17	9.409521	283	10.590479	0.8400
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.1600	9.395658	266	9.986137	18	9.409521	283	10.590479	0.8400
01	5924	265	119	17	9.409804	283	10.590196	0.8399
02	6189	265	102	18	9.410087	283	10.589913	98
03	6454	266	084	17	0370	283	9630	97
04	6720	264	067	18	0653	282	9347	96
05	6984	265	049	17	0935	283	9065	95
06	7249	265	032	18	1218	282	8782	94
07	7514	264	9.986014	18	1500	282	8500	93
08	7778	264	9.985996	17	1782	282	8218	92
09	8042	264	979	18	2064	281	7936	91
0.1610	8306	264	961	17	2345	282	7655	0.8390
11	8570	264	944	18	2627	281	7373	89
12	8834	264	926	18	2908	281	7092	88
13	9098	263	908	17	3189	281	6811	87
14	9361	263	891	18	3470	281	6530	86
15	9624	263	873	18	3751	281	6249	85
16	9.399887	263	855	17	4032	281	5968	84
17	9.400150	263	838	18	4313	280	5687	83
18	0413	262	820	18	4593	280	5407	82
19	0675	263	802	18	4873	280	5127	81
0.1620	0938	262	784	17	5153	280	4847	0.8380
21	1200	262	767	18	5433	280	4567	79
22	1462	262	749	18	5713	280	4287	78
23	1724	261	731	18	5993	279	4007	77
24	1985	262	713	17	6272	279	3728	76
25	9.402247	261	9.985696	18	9.416551	280	10.583449	75
26	2508	261	678	18	6831	279	3169	74
27	2769	261	660	18	7110	278	2890	73
28	3030	261	642	18	7388	279	2612	72
29	3291	261	624	18	7667	279	2333	71
0.1630	3552	260	606	18	7946	278	2054	0.8370
31	3812	261	588	17	8224	278	1776	69
32	4073	260	571	18	8502	278	1498	68
33	4333	260	553	18	8780	278	1220	67
34	4593	260	535	18	9058	278	0942	66
35	4853	260	517	18	9336	278	0664	65
36	5113	259	499	18	9614	277	0387	64
37	5372	259	481	18	9.419891	277	10.580109	63
38	5631	260	463	18	9.420168	277	10.579832	62
39	5891	259	445	18	0445	277	9555	61
0.1640	6150	258	427	18	0722	277	9278	0.8360
41	6408	259	409	18	0999	277	9001	59
42	6667	259	391	18	1276	276	8724	58
43	6926	258	373	18	1552	277	8448	57
44	7184	258	355	18	1829	276	8171	56
45	7442	258	337	18	2105	276	7895	55
46	7700	258	319	18	2381	276	7619	54
47	7958	258	301	18	2657	276	7343	53
48	8216	257	283	18	2933	275	7067	52
49	8473	258	265	18	3208	276	6792	51
0.1650	9.408731	258	9.985247	18	9.423484	276	10.579516	0.8350
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

Arg.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arg.
0.1650	9.408731	257	9.985247	18	9.423484	275	10.576516	0.8350
51	8988	257	229	18	3759	275	6241	49
52	9245	257	211	18	4034	275	5966	48
53	9502	257	193	18	4309	275	5691	47
54	9.409758	256	174	19	4584	275	5416	46
55	9.410015	257	156	18	4859	275	5141	45
56	0271	256	138	18	5133	274	4867	44
57	0528	257	120	18	5408	275	4592	43
58	0784	256	102	18	5682	274	4318	42
59	1040	256	084	18	5956	274	4044	41
0.1660	1295	255	065	19	6230	274	3770	0.8340
61	1551	256	047	18	6504	274	3496	39
62	1806	255	029	18	6777	273	3223	38
63	2062	256	9.985011	18	7051	274	2949	37
64	2317	255	9.984993	18	7324	273	2676	36
65	2572	255	974	19	7598	274	2403	35
66	2827	255	956	18	7871	273	2130	34
67	3081	254	938	18	8143	272	1857	33
68	3336	255	919	19	8416	273	1584	32
69	3590	254	901	18	8689	273	1311	31
0.1670	3844	254	883	18	8961	272	1039	0.8330
71	4098	254	865	18	9234	273	0767	29
72	4352	254	846	19	9506	272	0494	28
73	4606	253	828	18	9.429778	272	10.570222	27
74	4859	253	809	19	9.430050	271	10.569950	26
75	9.415112	254	9.984791	18	0321	271	9879	25
76	5366	253	773	19	0593	272	9407	24
77	5619	252	754	18	0864	271	9136	23
78	5871	253	736	18	1136	272	8865	22
79	6124	253	718	19	1407	271	8593	21
0.1680	6377	252	699	18	1678	271	8322	0.8320
81	6629	252	681	19	1949	271	8052	19
82	6881	252	662	18	2219	270	7781	18
83	7133	252	644	19	2490	271	7510	17
84	7385	252	625	18	2760	270	7240	16
85	7637	252	607	19	3030	271	6970	15
86	7889	251	588	18	3301	270	6700	14
87	8140	252	570	19	3571	270	6430	13
88	8392	251	551	18	3840	269	6160	12
89	8643	251	533	19	4110	270	5890	11
0.1690	8894	251	514	18	4380	269	5621	0.8310
91	9145	250	496	19	4649	269	5351	09
92	9395	251	477	19	4918	269	5082	08
93	9646	250	458	18	5187	269	4813	07
94	9.419896	250	440	19	5456	269	4544	06
95	9.420146	250	421	18	5725	269	4275	05
96	0396	250	403	19	5994	268	4006	04
97	0646	250	384	19	6262	269	3738	03
98	0896	250	365	18	6531	268	3469	02
0.1699	1146	249	347	19	6799	268	3201	01
0.1700	9.421395	249	9.984328	19	9.437067	268	10.562933	0.8300
Arg.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arg.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.1700	9.421395	249	9.984328	19	9.437067	268	10.562933	0.8300
01	1644	250	309	18	7335	268	2665	0.8299
02	1894	248	291	19	7603	267	2397	98
03	2142	249	272	19	7870	268	2130	97
04	2391	249	253	18	8138	267	1862	96
05	2640	249	235	19	8405	268	1595	95
06	2889	248	216	19	8673	267	1327	94
07	3137	248	197	19	8940	267	1060	93
08	3385	248	178	18	9207	267	0793	92
09	3633	248	160	19	9474	266	0527	91
0.1710	3881	248	141	19	9.439740	267	10.560260	0.8290
11	4129	247	122	19	9.440007	266	10.559993	89
12	4376	248	103	18	0273	266	9727	88
13	4624	247	085	19	0539	267	9461	87
14	4871	247	066	19	0806	266	9195	86
15	5118	247	047	19	1072	265	8929	85
16	5365	247	028	19	1337	266	8663	84
17	5612	247	9.984009	19	1603	266	8397	83
18	5859	246	9.983990	19	1869	265	8131	82
19	6105	247	971	18	2134	265	7866	81
0.1720	6352	246	953	19	2399	265	7601	0.8280
21	6598	246	934	19	2664	265	7336	79
22	6844	246	915	19	2929	265	7071	78
23	7090	246	896	19	3194	265	6806	77
24	7336	246	877	19	3459	265	6541	76
25	9.427582	245	9.983858	19	9.443724	264	10.556276	75
26	7827	245	839	19	3988	264	6012	74
27	8072	246	820	19	4252	265	5748	73
28	8318	245	801	19	4517	264	5483	72
29	8563	245	782	19	4781	264	5219	71
0.1730	8808	244	763	19	5045	263	4956	0.8270
31	9052	245	744	19	5308	264	4692	69
32	9297	244	725	19	5572	263	4428	68
33	9541	245	706	19	5835	264	4165	67
34	9.429786	244	687	19	6099	263	3901	66
35	9.430030	244	668	19	6362	263	3638	65
36	0274	244	649	19	6625	263	3375	64
37	0518	243	630	19	6888	263	3112	63
38	0761	244	611	19	7151	263	2849	62
39	1005	243	592	20	7414	262	2587	61
0.1740	1248	244	572	19	7676	263	2324	0.8260
41	1492	243	553	19	7939	262	2062	59
42	1735	243	534	19	8201	262	1799	58
43	1978	243	515	19	8463	262	1537	57
44	2221	242	496	19	8725	262	1275	56
45	2463	243	477	20	8987	262	1013	55
46	2706	242	457	19	9249	261	0752	54
47	2948	243	438	19	9510	262	0490	53
48	3191	242	419	19	9772	261	0229	52
49	3433	242	400	19	9.430033	261	10.549967	51
0.1750	9.433675	242	9.983381	19	9.450294	261	10.549706	0.8250
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.175.

Are.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang	Dif.	Log. Cot.	Are.
0.1750	9.433675	241	9.983381	20	9.450294	261	10.549706	0.8250
51	3916	242	361	19	0555	261	9445	49
52	4158	242	342	19	0816	261	9184	48
53	4400	241	323	19	1077	261	8923	47
54	4641	241	304	19	1338	260	8663	46
55	4882	241	284	20	1598	260	8402	45
56	5123	241	265	19	1858	261	8142	44
57	5364	241	246	19	2119	260	7881	43
58	5605	241	226	20	2379	260	7621	42
59	5846	240	207	19	2639	260	7361	41
0.1760	6086	241	188	19	2899	259	7101	0.8240
61	6327	240	168	19	3158	260	6842	39
62	6567	240	149	20	3418	259	6582	38
63	6807	240	129	19	3677	260	6323	37
64	7047	240	110	19	3937	259	6063	36
65	7287	239	091	20	4196	259	5804	35
66	7526	240	071	19	4455	259	5545	34
67	7766	239	052	20	4714	259	5286	33
68	8005	239	032	19	4973	258	5027	32
69	8244	239	013	20	5231	259	4769	31
0.1770	8483	239	9.982993	19	5490	258	4510	0.8230
71	8722	239	974	19	5748	259	4252	29
72	8961	239	955	20	6007	258	3993	28
73	9200	238	935	19	6265	258	3735	27
74	9438	239	916	20	6523	258	3477	26
75	9677	238	9.982896	20	9.456781	258	10.543219	25
76	9.439915	238	876	19	7039	257	2962	24
77	9.440153	238	857	20	7296	258	2704	23
78	0391	238	837	19	7554	257	2446	22
79	0629	237	818	20	7811	257	2189	21
0.1780	0866	238	798	19	8068	257	1932	0.8220
81	1104	237	779	20	8325	257	1675	19
82	1341	238	759	20	8582	257	1418	18
83	1579	237	739	19	8839	257	1161	17
84	1816	237	720	20	9096	257	0904	16
85	2053	236	700	20	9353	256	0647	15
86	2289	237	680	19	9609	256	0391	14
87	2526	237	661	20	9.459863	257	10.540135	13
88	2763	236	641	20	9.460122	256	10.539878	12
89	2999	236	621	19	0378	256	9622	11
0.1790	3235	237	602	20	0634	256	9366	0.8210
91	3472	236	582	20	0890	255	9111	09
92	3708	235	562	19	1145	256	8855	08
93	3943	236	543	20	1401	255	8599	07
94	4179	236	523	20	1656	256	8344	06
95	4415	235	503	20	1912	255	8088	05
96	4650	235	483	19	2167	255	7833	04
97	4885	236	464	20	2422	255	7578	03
98	5121	235	444	20	2677	255	7323	02
0.1799	5356	234	424	20	2932	254	7068	01
0.1800	9.445590	234	9.982404	20	9.463186	254	10.536814	0.8200
Are.	Log. Co in.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Are.

0.820.

0.180

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.1800	9.445590	235	9.982404	20	9.463186	255	10.536814	0.8200
01	5825	235	384	20	3441	254	6559	0.8199
02	6060	234	364	20	3695	254	6305	98
03	6294	234	345	19	3950	255	6050	97
04	6529	235	325	20	4204	254	5796	96
05	6763	234	305	20	4458	254	5542	95
06	6997	234	285	20	4712	254	5288	94
07	7231	234	265	20	4966	253	5034	93
08	7465	233	245	20	5219	254	4781	92
09	7698	234	225	20	5473	253	4527	91
0.1810	7932	233	205	20	5726	254	4274	0.8190
11	8165	233	185	20	5980	253	4020	89
12	8398	233	165	20	6233	253	3767	88
13	8631	233	145	19	6486	253	3514	87
14	8864	233	126	20	6739	253	3261	86
15	9097	233	106	20	6992	252	3008	85
16	9330	232	086	20	7244	253	2756	84
17	9562	233	066	21	7497	252	2503	83
18	9449795	232	045	20	7749	253	2251	82
19	9.450027	232	025	20	8002	252	1998	81
0.1820	0259	232	9.982005	20	8254	252	1746	0.8180
21	0491	232	9.981985	20	8506	252	1494	79
22	0723	232	965	20	8758	252	1242	78
23	0955	232	945	20	9010	251	0990	77
24	1187	231	925	20	9261	252	0739	76
25	9.451418	231	905	20	9513	252	0487	75
26	1649	232	885	20	9.469765	251	10.530236	74
27	1881	231	865	20	9.470016	251	10.529984	73
28	2112	231	845	21	0267	251	9733	72
29	2343	230	824	20	0518	251	9482	71
0.1830	2573	231	804	20	0769	251	9231	0.8170
31	2804	231	784	20	1020	251	8980	69
32	3035	230	764	20	1271	250	8729	68
33	3265	230	744	20	1521	251	8479	67
34	3495	231	724	21	1772	250	8228	66
35	3726	230	703	20	2022	250	7978	65
36	3956	229	683	20	2272	251	7728	64
37	4185	230	663	20	2523	250	7477	63
38	4415	230	643	21	2773	250	7227	62
39	4645	229	622	20	3023	249	6978	61
0.1840	4874	230	602	20	3272	250	6728	0.8160
41	5104	229	582	21	3522	249	6478	59
42	5333	229	561	20	3771	250	6229	58
43	5562	229	541	20	4021	249	5979	57
44	5791	229	521	21	4270	249	5730	56
45	6020	228	500	20	4519	249	5481	55
46	6248	229	480	20	4768	249	5232	54
47	6477	228	460	21	5017	249	4983	53
48	6705	229	439	20	5266	249	4734	52
49	6934	228	419	20	5515	248	4485	51
0.1850	9.457162	228	9.981399	20	9.475763	248	10.524237	0.8150
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
1850	9.457162		9.981399		9.475763		10.524237	0.8150
51	7390	228	378	21	6012	249	3988	49
52	7618	228	358	20	6260	248	3740	48
53	7846	227	337	20	6508	248	3492	47
54	8073	228	317	21	6756	248	3244	46
55	8301	227	296	20	7004	248	2996	45
56	8528	227	276	20	7252	248	2748	44
57	8755	228	256	21	7500	248	2500	43
58	8983	227	235	20	7748	247	2252	42
59	9210	226	215	21	7995	248	2005	41
1860	9436	227	194	21	8243	247	1758	0.8140
61	9663	227	173	20	8490	247	1510	39
62	9450890	226	153	21	8737	247	1263	38
63	9460116	227	132	20	8984	247	1016	37
64	0343	226	112	21	9231	247	0769	36
65	0569	226	091	20	9478	246	0522	35
66	0795	226	071	21	9724	247	0276	34
67	1021	226	050	21	9479971	246	10.520029	33
68	1247	226	029	20	9480217	247	10.519783	32
69	1473	225	9.981009	21	0464	246	9536	31
1870	1698	226	9.980988	20	0710	246	9290	0.8130
71	1924	225	968	21	0956	246	9044	29
72	2149	225	947	21	1202	246	8798	28
73	2374	225	926	20	1448	246	8552	27
74	2599	225	906	21	1694	245	8306	26
75	9.462824	225	9.980885	21	9.481939	246	10.518061	25
76	3049	225	864	21	2185	245	7815	24
77	3274	224	843	20	2430	246	7570	23
78	3498	225	823	21	2676	245	7325	22
79	3723	224	802	21	2921	245	7079	21
1880	3947	224	781	20	3166	245	6834	0.8120
81	4171	224	761	21	3411	245	6589	19
82	4395	224	740	21	3656	244	6345	18
83	4619	224	719	21	3900	245	6100	17
84	4843	224	698	21	4145	244	5855	16
85	5067	223	677	20	4389	245	5611	15
86	5290	224	657	21	4634	244	5366	14
87	5514	223	636	21	4878	244	5122	13
88	5737	223	615	21	5122	244	4878	12
89	5960	223	594	21	5366	244	4634	11
1890	6183	223	573	21	5610	244	4390	0.8110
91	6406	223	552	21	5854	244	4146	09
92	6629	223	531	21	6098	243	3902	08
93	6852	222	511	20	6341	244	3659	07
94	7074	223	490	21	6585	243	3415	06
95	7297	222	469	21	6828	243	3172	05
96	7519	222	448	21	7071	243	2929	04
97	7741	222	427	21	7314	243	2686	03
98	7963	222	406	21	7557	243	2443	02
1899	8185	222	385	21	7800	243	2200	01
1900	9.468407	222	9.980364	21	9.488043	243	10.511957	0.8100
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

Are.	Log. Sin.	Dif.	Log. Cosine.	D.	Log. Tang.	Dif.	Log. Cot.	Are.
α. 1900	9.468407	222	9.980364	21	9.488043	243	10.511957	α. 8100
01	8629	221	343	21	8286	242	1714	0.8099
02	8850	222	322	21	8528	243	1472	98
03	9072	221	301	21	8771	242	1229	97
04	9293	221	280	21	9013	242	0987	96
05	9514	221	259	21	9255	242	0745	95
06	9735	221	238	21	9497	242	0503	94
07	9.469956	221	217	21	9739	242	0261	93
08	9.470177	221	196	21	9.489981	242	10.510019	92
09	0368	220	175	22	9.490223	242	10.509777	91
α. 1910	0618	221	153	21	0465	241	9535	0.8090
11	0839	220	132	21	0706	242	9294	89
12	1059	220	111	21	0948	241	9052	88
13	1279	220	090	21	1189	241	8811	87
14	1499	220	069	21	1430	242	8570	86
15	1719	220	048	21	1672	241	8329	85
16	1939	220	027	22	1913	240	8088	84
17	2159	219	9.980005	21	2153	241	7847	83
18	2378	220	9.979984	21	2394	241	7606	82
19	2598	219	963	21	2635	241	7365	81
α. 1920	2817	220	942	21	2876	240	7125	0.8080
21	3037	219	921	22	3116	240	6884	79
22	3256	219	899	21	3356	241	6644	78
23	3475	219	878	21	3597	240	6404	77
24	3694	218	857	21	3837	240	6163	76
25	9.473912	219	9.979836	22	9.494077	240	10.505923	75
26	4131	218	814	21	4317	239	5683	74
27	4349	219	793	21	4556	240	5444	73
28	4568	218	772	22	4796	240	5204	72
29	4786	218	750	21	5036	239	4964	71
α. 1930	5004	218	729	21	5275	240	4725	0.8070
31	5222	218	708	22	5515	239	4485	69
32	5440	218	686	21	5754	239	4246	68
33	5658	218	665	21	5993	239	4007	67
34	5876	217	644	22	6232	239	3768	66
35	6093	218	622	21	6471	239	3529	65
36	6311	217	601	22	6710	239	3290	64
37	6528	217	579	21	6949	238	3052	63
38	6745	217	558	22	7187	239	2813	62
39	6962	217	536	21	7426	238	2574	61
α. 1940	7179	217	515	21	7664	238	2336	0.8060
41	7396	217	494	22	7902	239	2098	59
42	7613	216	472	21	8141	238	1860	58
43	7829	217	451	22	8379	238	1621	57
44	8046	216	429	21	8617	237	1383	56
45	8262	216	408	22	8854	238	1146	55
46	8478	216	386	21	9092	238	0908	54
47	8694	216	365	22	9330	237	0670	53
48	8910	216	343	22	9567	238	0433	52
49	9126	216	321	21	9.499805	237	10.500195	51
α. 1950	9.479342	216	9.979300	21	9.500042	237	10.499958	0.8050
Are.	Log. Cosine.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Are.

0. 195.

Arc.	Log. Sin.	Dif.	Log. Cosine.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0. 1950	9.479342	216	9.979300	22	9.500042	237	10.499958	0.8050
51	9558	215	278	21	0279	238	9721	49
52	9773	216	257	22	0517	237	9484	48
53	9.479989	215	235	22	0754	236	9247	47
54	9.480204	215	213	21	0990	237	9010	46
55	0419	215	192	21	1227	237	8773	45
56	0634	215	170	21	1464	237	8536	44
57	0849	215	149	22	1701	236	8300	43
58	1064	215	127	22	1937	236	8063	42
59	1279	214	105	21	2173	237	7827	41
0. 1960	1493	215	084	22	2410	236	7590	0.8040
61	1708	214	062	22	2646	236	7354	39
62	1922	214	040	22	2882	236	7118	38
63	2136	214	9.979018	21	3118	236	6882	37
64	2350	214	9.978997	22	3354	236	6646	36
65	2564	214	975	22	3590	235	6411	35
66	2778	214	953	22	3825	236	6175	34
67	2992	214	931	21	4061	235	5939	33
68	3206	213	910	22	4296	236	5704	32
69	3419	214	888	22	4532	235	5469	31
0. 1970	3633	213	866	22	4767	235	5233	0.8030
71	3846	213	844	22	5002	235	4998	29
72	4059	213	822	21	5237	235	4763	28
73	4272	213	801	22	5472	235	4528	27
74	4485	213	779	22	5707	234	4293	26
75	9.484698	213	9.978757	22	9.505941	235	10.494059	25
76	4911	213	735	22	6176	235	3824	24
77	5124	212	713	22	6411	234	3590	23
78	5336	212	691	22	6645	234	3355	22
79	5548	213	669	22	6879	234	3121	21
0. 1980	5761	212	647	22	7113	235	2887	0.8020
81	5973	212	625	22	7348	234	2653	19
82	6185	212	603	22	7582	233	2419	18
83	6397	212	581	21	7815	234	2185	17
84	6609	211	560	22	8049	234	1951	16
85	6820	212	538	22	8283	233	1717	15
86	7032	211	516	22	8516	234	1484	14
87	7243	211	494	22	8750	233	1250	13
88	7455	211	472	23	8983	234	1017	12
89	7666	211	449	22	9217	233	0783	11
0. 1990	7877	211	427	22	9450	233	0550	0.8010
91	8088	211	405	22	9683	233	0317	09
92	8299	211	383	22	9.509916	233	10.490084	08
93	8510	210	361	22	9.510149	233	10.489851	07
94	8721	211	339	22	0382	232	9619	06
95	8931	211	317	22	0614	233	9386	05
96	9142	210	295	22	0847	232	9153	04
97	9352	210	273	22	1079	233	8921	03
98	9562	210	251	22	1312	232	8688	02
0. 1999	9772	210	229	22	1544	232	8456	01
0. 2000	9.489982	210	9.978206	23	9.511776	232	10.488224	0.8000
Arc.	Log. Sin.	Dif.	Log. Cosine.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.

0. 800.

O. 200.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.2000	9.489982	210	9.978206	22	9.511776	232	10.488224	0.8000
01	9.490192	210	184	22	2008	232	7992	0.7999
02	0402	210	162	22	2240	232	7760	98
03	0612	209	140	22	2472	232	7528	97
04	0821	210	118	23	2704	231	7296	96
05	1031	209	095	22	2935	232	7065	95
06	1240	209	073	22	3167	231	6833	94
07	1449	209	051	22	3398	232	6602	93
08	1658	209	029	23	3630	231	6370	92
09	1867	209	9.978006	22	3861	231	6139	91
0.2010	2076	209	9.977984	22	4092	231	5908	0.7999
11	2285	209	962	22	4323	231	5677	89
12	2494	208	940	23	4554	231	5446	88
13	2702	209	917	22	4785	231	5215	87
14	2911	208	895	22	5016	231	4984	86
15	3119	208	873	23	5247	230	4753	85
16	3327	209	850	22	5477	231	4523	84
17	3536	208	828	23	5708	230	4292	83
18	3744	207	805	22	5938	230	4062	82
19	3951	208	783	22	6168	231	3832	81
0.2020	4159	208	761	23	6399	230	3602	0.7980
21	4367	207	738	22	6629	230	3371	79
22	4574	208	716	23	6859	230	3141	78
23	4782	207	693	22	7089	229	2912	77
24	4989	208	671	22	7318	230	2682	76
25	9.495197	207	9.977649	23	9.517548	230	10.482452	75
26	5404	207	626	22	7778	229	2222	74
27	5611	207	604	23	8007	230	1993	73
28	5818	206	581	22	8237	229	1764	72
29	6024	207	559	23	8466	229	1534	71
0.2030	6231	207	536	22	8695	229	1305	0.7970
31	6438	206	514	23	8924	229	1076	69
32	6644	206	491	23	9153	229	0847	68
33	6850	207	468	22	9382	229	0618	67
34	7057	206	446	23	9611	229	0389	66
35	7263	206	423	22	9.519840	228	10.480160	65
36	7469	206	401	23	9.520068	229	10.479932	64
37	7675	206	378	22	0297	228	9703	63
38	7881	205	356	23	0525	229	9475	62
39	8086	206	333	23	0754	228	9247	61
0.2040	8292	206	310	22	0982	228	9018	0.7960
41	8498	205	288	23	1210	228	8790	59
42	8703	205	265	23	1438	228	8562	58
43	8908	205	242	22	1666	228	8334	57
44	9113	205	220	23	1894	228	8106	56
45	9318	205	197	23	2122	227	7879	55
46	9523	205	174	23	2349	228	7651	54
47	9728	205	151	22	2577	227	7423	53
48	9.499933	205	129	23	2804	228	7196	52
49	9.500138	204	106	23	3032	227	6968	51
0.2050	9.500342	204	9.977083	23	9.523259	227	10.476741	0.7950
Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.

O. 795.

0. 205.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.2050	9.500342	205	9.997083	23	9.523259	227	10.476741	0.7950
51	0547	204	060	23	3486	227	6514	49
52	0751	204	038	22	3713	227	6287	48
53	0955	204	9.977015	23	3940	227	6060	47
54	1159	204	9.976992	23	4167	227	5833	46
55	1363	204	969	23	4394	227	5606	45
56	1567	204	946	23	4621	227	5379	44
57	1771	204	924	22	4847	226	5153	43
58	1975	203	901	23	5074	226	4926	42
59	2178	204	878	23	5300	227	4700	41
0.2060	2382	203	855	23	5527	226	4474	0.7940
61	2585	203	832	23	5753	226	4247	39
62	2788	203	809	23	5979	226	4021	38
63	2991	203	786	23	6205	226	3795	37
64	3194	203	763	23	6431	226	3569	36
65	3397	203	741	23	6657	226	3343	35
66	3600	203	718	23	6883	225	3117	34
67	3803	203	695	23	7108	226	2892	33
68	4006	202	672	23	7334	225	2666	32
69	4208	202	649	23	7559	226	2441	31
0.2070	4410	203	626	23	7785	225	2215	0.7930
71	4613	202	603	23	8010	225	1990	29
72	4815	202	580	23	8235	225	1765	28
73	5017	202	557	23	8460	225	1540	27
74	5219	202	534	23	8685	225	1315	26
75	9.505421	202	9.976511	24	9.528910	225	10.471090	25
76	5623	201	487	23	9135	225	0865	24
77	5824	202	464	23	9360	225	0640	23
78	6026	201	441	23	9585	224	0415	22
79	6227	202	418	23	9.529809	225	10.470191	21
0.2080	6429	201	395	23	9.530034	224	10.469966	0.7920
81	6630	201	372	23	0258	224	0742	19
82	6831	201	349	23	0482	225	0518	18
83	7032	201	326	23	0707	224	0294	17
84	7233	201	303	24	0931	224	0069	16
85	7434	201	279	23	1155	224	8845	15
86	7635	200	256	23	1379	223	8621	14
87	7835	201	233	23	1602	224	8398	13
88	8036	200	210	23	1826	224	8174	12
89	8236	201	187	24	2050	223	7950	11
0.2090	8437	200	163	23	2273	224	7727	0.7910
91	8637	200	140	23	2497	223	7503	09
92	8837	200	117	23	2720	224	7280	08
93	9037	200	094	24	2944	223	7057	07
94	9237	200	070	23	3167	223	6833	06
95	9437	200	047	23	3390	223	6610	05
96	9637	199	024	24	3613	223	6387	04
97	9.509836	200	9.976000	23	3836	223	6164	03
98	9.510036	199	9.975977	23	4059	222	5941	02
0.2099	0235	199	954	24	4281	223	5719	01
0.2100	9.510434	199	9.975930	24	9.534504	223	10.465496	0.7900
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0. 790.

0. 210.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.2100	9.510434	200	9.975930	23	9.534504	223	10.465496	0.7900
01	0634	199	907	23	4727	222	5274	0.7899
02	0833	199	884	23	4949	222	5051	98
03	1032	199	860	24	5171	223	4829	97
04	1231	199	837	23	5394	222	4606	96
05	1429	198	813	24	5616	222	4384	95
06	1628	199	790	23	5838	222	4162	94
07	1827	190	767	23	6060	222	3940	93
08	2025	198	743	24	6282	222	3718	92
09	2223	198	720	23	6504	222	3496	91
0.2110	2422	199	696	24	6726	222	3274	0.7890
11	2620	198	673	23	6947	221	3053	89
12	2818	198	649	24	7169	222	2831	88
13	3016	198	626	23	7390	221	2610	87
14	3214	198	602	24	7612	222	2388	86
15	3412	198	579	23	7833	221	2167	85
16	3609	197	555	24	8054	221	1946	84
17	3807	198	532	23	8275	221	1725	83
18	4004	197	508	24	8496	221	1504	82
19	4202	198	484	24	8717	221	1283	81
0.2120	4399	197	461	23	8938	221	1062	0.7880
21	4596	197	437	24	9159	221	0841	79
22	4793	197	414	23	9380	220	0620	78
23	4990	197	390	24	9600	221	0400	77
24	5187	197	366	24	9.539821	220	10.460179	76
25	9.515384	197	9.975343	23	9.540041	220	10.459959	75
26	5581	196	319	24	0262	221	9738	74
27	5777	196	295	24	0482	220	9518	73
28	5974	197	272	23	0702	220	9298	72
29	6170	196	248	24	0922	220	9078	71
0.2130	6366	196	224	24	1142	220	8858	0.7870
31	6563	197	201	23	1362	220	8638	69
32	6759	196	177	24	1582	220	8418	68
33	6955	196	153	24	1802	219	8199	67
34	7150	195	129	24	2021	220	7979	66
35	7346	196	106	23	2241	220	7759	65
36	7542	196	082	24	2460	219	7540	64
37	7738	196	058	24	2680	220	7321	63
38	7933	195	034	24	2899	219	7101	62
39	8128	195	9.975010	24	3118	219	6882	61
0.2140	8324	196	9.974987	23	3337	219	6663	0.7860
41	8519	195	963	24	3556	219	6444	59
42	8714	195	939	24	3775	219	6225	58
43	8909	195	915	24	3994	219	6006	57
44	9104	195	891	24	4213	218	5787	56
45	9299	195	867	24	4431	218	5569	55
46	9493	194	843	24	4650	219	5350	54
47	9688	195	819	24	4869	218	5131	53
48	9.519882	194	795	24	5087	218	4913	52
49	9.520077	195	772	23	5305	218	4695	51
0.2150	9.520271	194	9.974748	24	9.545524	219	10.454476	0.7850
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0. 785.

o. 215.

Arg.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arg.
2150	9.520271	194	9.974748	24	9.545524	218	10.454476	0.7850
51	0465	194	724	24	5742	218	4258	49
52	0659	194	700	24	5960	218	4040	48
53	0853	194	676	24	6178	218	3822	47
54	1047	194	652	24	6396	218	3604	46
55	1241	194	628	24	6614	218	3386	45
		194		24		217		
56	1435	194	604	24	6831	218	3169	44
57	1629	193	580	24	7049	218	2951	43
58	1822	194	556	25	7267	217	2733	42
59	2016	193	531	24	7484	218	2516	41
2160	2209	193	507	24	7702	217	2299	0.7840
		193		24		217		
61	2402	193	483	24	7919	217	2081	39
62	2595	193	459	24	8136	217	1864	38
63	2788	193	435	24	8353	217	1647	37
64	2981	193	411	24	8570	217	1430	36
65	3174	193	387	24	8787	217	1213	35
		193		24		217		
66	3367	193	363	24	9004	217	0996	34
67	3560	192	339	25	9221	217	0779	33
68	3752	193	314	24	9438	216	0562	32
69	3945	192	290	24	9654	217	0346	31
2170	4137	192	266	24	9.549871	216	10.450129	0.7830
		192		24		216		
71	4329	192	242	24	9.550087	217	10.449913	29
72	4521	192	218	25	0304	216	9796	28
73	4713	192	193	24	0520	216	9480	27
74	4905	192	169	24	0736	217	9264	26
75	9.525097	192	9.974145	24	0953	216	9048	25
		192		24		216		
76	5289	192	121	25	1169	216	8832	24
77	5481	191	96	24	1385	215	8616	23
78	5672	192	72	24	1600	216	8400	22
79	5864	191	48	24	1816	216	8184	21
2180	6055	191	9.974023	25	2032	216	7968	0.7820
		192		24		216		
81	6247	191	9.973999	24	2248	215	7752	19
82	6438	191	975	25	2463	216	7537	18
83	6629	191	950	24	2679	215	7321	17
84	6820	191	926	24	2894	215	7106	16
85	7011	191	902	24	3109	216	6891	15
		191		25		216		
86	7202	191	877	24	3325	215	6675	14
87	7393	190	853	24	3540	215	6460	13
88	7583	190	828	25	3755	215	6245	12
89	7774	191	804	24	3970	215	6030	11
2190	7964	190	780	24	4185	215	5815	0.7810
		191		25		215		
91	8155	190	755	24	4400	214	5601	09
92	8345	190	731	25	4614	215	5386	08
93	8535	190	706	24	4829	215	5171	07
94	8725	190	682	25	5044	214	4957	06
95	8915	190	657	24	5258	214	4742	05
		190		24		214		
96	9105	190	633	25	5472	215	4528	04
97	9295	190	608	24	5687	214	4313	03
98	9485	189	584	25	5901	214	4099	02
2199	9674	189	559	25	6115	214	3885	01
2200	9.529864	190	9.973535	24	9.556329	214	10.443671	0.7800
		190		24		214		
Arg.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Cot.	Dif.	Log. Tang.	Arg.

o. 780.

O. 220.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.2200	9.529864	189	9.973535	25	9.556329	214	10.443671	0.7800
01	9.530053	190	510	25	6543	214	3457	0.7799
02	0243	189	485	25	6757	214	3243	98
03	0432	189	461	24	6971	214	3029	97
04	0621	189	436	25	7185	214	2815	96
05	0810	189	412	24	7398	213	2602	95
06	0999	189	387	25	7612	214	2388	94
07	1188	189	362	25	7826	214	2174	93
08	1377	189	338	24	8039	213	1961	92
09	1565	188	313	25	8252	213	1748	91
0.2210	1754	189	288	25	8466	214	1534	0.7790
11	1943	189	264	24	8679	213	1321	89
12	2131	188	239	25	8892	213	1108	88
13	2319	188	214	25	9105	213	0895	87
14	2508	189	190	24	9318	213	0682	86
15	2696	188	165	25	9531	213	0469	85
16	2884	188	140	25	9744	212	0256	84
17	3072	188	115	25	9.559956	213	10.440044	83
18	3260	187	091	24	9.560169	213	10.439831	82
19	3447	188	066	25	0382	212	9619	81
0.2220	3635	188	041	25	0594	212	9406	0.7780
21	3823	187	9.973016	25	0806	212	9194	79
22	4010	187	9.972991	24	1019	212	8981	78
23	4197	188	967	25	1231	212	8769	77
24	4385	187	942	25	1443	212	8557	76
25	9.534572	187	917	25	9.561655	212	10.438345	75
26	4759	187	892	25	1867	212	8133	74
27	4946	187	867	25	2079	212	7921	73
28	5133	187	842	25	2291	212	7709	72
29	5320	187	817	25	2503	211	7497	71
0.2230	5507	186	792	25	2714	212	7286	0.7770
31	5693	187	767	24	2926	212	7074	69
32	5880	187	743	25	3138	212	6863	68
33	6067	187	718	25	3349	211	6651	67
34	6253	186	693	25	3560	211	6440	66
35	6439	186	668	25	3772	212	6228	65
36	6625	187	643	25	3983	211	6017	64
37	6812	186	618	25	4194	211	5806	63
38	6998	186	593	25	4405	211	5595	62
39	7184	185	568	25	4616	211	5384	61
0.2240	7369	186	543	25	4827	211	5173	0.7760
41	7555	186	517	25	5038	210	4962	59
42	7741	185	492	25	5248	211	4752	58
43	7926	186	467	25	5459	211	4541	57
44	8112	185	442	25	5670	210	4330	56
45	8297	186	417	25	5880	210	4120	55
46	8483	185	392	25	6091	211	3909	54
47	8668	185	367	25	6301	210	3699	53
48	8853	185	342	25	6511	211	3489	52
49	9038	185	317	25	6722	211	3279	51
0.2250	9.539223	185	9.972291	26	9.566932	210	10.433068	0.7750
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

O. 775.

O. 225.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.2250	9.539223	185	9.972291	25	9.566932	210	10.433068	0.7750
51	9408	185	266	25	7142	210	2858	49
52	9593	184	241	25	7352	210	2648	48
53	9777	184	216	25	7562	210	2439	47
54	9.539962	185	191	25	7771	209	2229	46
55	9.540147	185	165	26	7981	210	2019	45
56	0331	184	140	25	8191	210	1809	44
57	0515	184	115	25	8400	209	1600	43
58	0700	185	090	25	8610	210	1390	42
59	0884	184	064	26	8819	209	1181	41
0.2260	1068	184	039	25	9029	210	0971	0.7740
61	1252	184	9.972014	25	9238	209	0762	39
62	1436	183	9.971989	26	9447	209	0553	38
63	1619	184	963	25	9656	209	0344	37
64	1803	184	938	25	9.569865	209	10.430135	36
65	1987	183	913	25	9.570074	209	10.429926	35
66	2170	184	887	26	0283	209	9717	34
67	2354	183	862	25	0492	209	9508	33
68	2537	183	836	26	0701	208	9299	32
69	2720	184	811	25	0909	209	9091	31
0.2270	2904	183	786	26	1118	208	8882	0.7730
71	3087	183	760	25	1326	209	8674	29
72	3270	183	735	26	1535	208	8465	28
73	3453	182	709	25	1743	209	8257	27
74	3635	183	684	26	1952	208	8049	26
75	9.543818	183	9.971658	25	9.572160	208	10.427840	25
76	4001	182	633	25	2368	208	7632	24
77	4183	183	608	26	2576	208	7424	23
78	4366	182	582	26	2784	208	7216	22
79	4548	183	556	25	2992	208	7008	21
0.2280	4731	182	531	26	3200	207	6800	0.7720
81	4913	182	505	25	3407	208	6593	19
82	5095	182	480	26	3615	208	6385	18
83	5277	182	454	25	3823	207	6177	17
84	5459	182	429	26	4030	208	5970	16
85	5641	182	403	25	4238	207	5762	15
86	5823	181	378	26	4445	207	5555	14
87	6004	182	352	26	4652	208	5348	13
88	6186	181	326	25	4860	207	5140	12
89	6367	182	301	26	5067	207	4933	11
0.2290	6549	181	275	26	5274	207	4726	0.7710
91	6730	182	249	25	5481	207	4519	09
92	6912	181	224	26	5688	207	4312	08
93	7093	181	198	26	5895	207	4105	07
94	7274	181	172	25	6102	206	3899	06
95	7455	181	147	26	6308	207	3692	05
96	7636	181	121	26	6515	206	3485	04
97	7817	180	095	26	6721	207	3279	03
98	7997	181	069	25	6928	206	3072	02
0.2299	8178	181	044	25	7134	206	2866	01
0.2300	9.548359	181	9.971018	26	9.577341	207	10.422659	0.7700
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

O. 770.

0.230.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.2300	9.548359	180	9.971018	26	9.577341	206	10.422659	0.7700
01	8539	180	9.970992	26	7547	206	2453	0.7699
02	8719	181	966	26	7753	206	2247	98
03	8900	180	940	26	7959	206	2041	97
04	9080	180	915	26	8165	206	1835	96
05	9260	180	889	26	8371	206	1629	95
06	9440	180	863	26	8577	206	1423	94
07	9620	180	837	26	8783	206	1217	93
08	9800	180	811	26	8989	206	1011	92
09	9.549980	180	785	26	9195	205	0805	91
0.2310	9.550160	180	759	26	9400	206	0600	0.7690
11	0339	180	734	26	9606	205	0394	89
12	0519	179	708	26	9.5-9811	206	10.420189	88
13	0698	180	682	26	9.580017	205	10.419983	87
14	0878	180	656	26	0222	205	9778	86
15	1057	179	630	26	0427	205	9573	85
16	1236	179	604	26	0632	206	9368	84
17	1415	179	578	26	0838	205	9163	83
18	1594	179	552	26	1043	205	8958	82
19	1773	179	526	26	1248	204	8753	81
0.2320	1952	179	500	26	1452	205	8548	0.7680
21	2131	179	474	26	1657	205	8343	79
22	2310	178	448	26	1862	205	8138	78
23	2488	179	422	26	2067	204	7933	77
24	2667	178	396	26	2271	205	7729	76
0.2330	9.552845	179	9.970370	27	9.582476	204	10.417524	75
26	3024	178	343	26	2680	205	7320	74
27	3202	178	317	26	2885	204	7115	73
28	3380	178	291	26	3089	204	6911	72
29	3558	178	265	26	3293	204	6707	71
0.2340	3736	178	239	26	3497	205	6503	0.7670
31	3914	178	213	26	3702	204	6299	69
32	4092	178	187	26	3906	204	6095	68
33	4270	178	161	26	4110	203	5891	67
34	4448	177	134	27	4313	204	5687	66
35	4625	178	108	26	4517	204	5483	65
36	4803	177	082	26	4721	204	5279	64
37	4980	178	056	27	4925	203	5075	63
38	5158	177	029	26	5128	204	4872	62
39	5335	177	9.970003	26	5332	203	4668	61
0.2350	5512	177	9.969977	26	5535	204	4465	0.7660
41	5689	177	951	27	5739	203	4261	59
42	5866	177	924	26	5942	203	4058	58
43	6043	177	898	26	6145	203	3855	57
44	6220	177	872	26	6348	204	3652	56
45	6397	177	845	27	6552	203	3449	55
46	6574	176	819	26	6755	203	3246	54
47	6750	177	793	27	6958	202	3043	53
48	6927	176	766	26	7160	203	2840	52
49	7103	177	740	26	7363	203	2637	51
0.2350	9.557280	177	9.969714	26	9.587566	203	10.412434	0.7650
Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.

0.765.

o. 235.

Are.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang	Dif.	Log. Cot.	Are.
0.2350	9.557280		9.969714		9.587566		10.412434	0.7650
51	7456	176	687	27	7769	203	2231	49
52	7632	176	661	26	7971	202	2029	48
53	7808	176	634	27	8174	203	1826	47
54	7984	176	608	26	8376	202	1624	46
55	8160	176	582	26	8579	203	1421	45
		176		27		202		
56	8336	176	555	26	8781	202	1219	44
57	8512	176	529	26	8983	202	1017	43
58	8688	176	502	27	9186	203	0814	42
59	8863	175	476	26	9388	202	0612	41
0.2360	9039	176	449	27	9590	202	0410	0.7640
		175		26		202		
61	9214	176	423	27	9792	202	0208	39
62	9390	176	396	27	9.589994	202	10.410006	38
63	9565	175	369	27	9.590196	202	10.409805	37
64	9740	175	343	26	0397	201	9603	36
65	9.559915	175	316	27	0599	202	9401	35
		175		26		202		
66	9.560090	175	290	27	0801	201	9199	34
67	0205	175	263	27	1002	202	8998	33
68	0400	175	237	26	1204	202	8796	32
69	0615	175	210	27	1405	201	8595	31
0.2370	0790	175	183	27	1607	202	8393	0.7630
		175		26		201		
71	0965	174	157	27	1808	201	8192	29
72	1139	175	130	27	2009	201	7991	28
73	1314	175	103	27	2210	201	7790	27
74	1488	174	077	26	2411	201	7589	26
75	9.561662	174	050	27	9.592612	201	10.407388	25
		175		27		201		
76	1837	174	9.969023	26	2813	201	7187	24
77	2011	174	9.968997	27	3014	201	6986	23
78	2185	174	970	27	3215	201	6785	22
79	2359	174	943	27	3416	201	6584	21
0.2380	2533	174	916	27	3617	201	6383	0.7620
		174		26		200		
81	2707	174	890	27	3817	201	6183	19
82	2881	173	863	27	4018	200	5982	18
83	3054	174	836	27	4218	201	5782	17
84	3228	173	809	27	4419	200	5581	16
85	3401	173	782	27	4619	200	5381	15
		174		26		200		
86	3575	173	756	27	4819	201	5181	14
87	3748	173	729	27	5020	200	4981	13
88	3922	174	702	27	5220	200	4780	12
89	4095	173	675	27	5420	200	4580	11
0.2390	4268	173	648	27	5620	200	4380	0.7610
		173		27		200		
91	4441	173	621	27	5820	200	4180	09
92	4614	173	594	27	6020	200	3980	08
93	4787	173	567	27	6219	199	3781	07
94	4960	173	540	27	6419	200	3581	06
95	5132	172	514	26	6619	200	3381	05
		173		27		199		
96	5305	173	487	27	6818	200	3182	04
97	5478	172	460	27	7018	200	2982	03
98	5650	172	433	27	7218	200	2783	02
0.2399	5822	172	406	27	7417	199	2583	01
0.2400	9.565995	173	9.968379	27	9.597616	199	10.402384	0.7600
Are.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	DM.	Log. Tang.	Are.

o. 760.

Arc.	Log. Sin.	Dif.	Log. Cos.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.2400	9.565995		9.968379		9.597616		10.402384	0.7600
01	6167	172	352	27	7816	200	2185	0.7599
02	6339	172	325	27	8015	199	1985	98
03	6511	172	298	27	8214	199	1786	97
04	6683	172	270	28	8413	199	1587	96
05	6855	172	243	27	8612	199	1388	95
		172		27		199		
06	7027	172	216	27	8811	199	1189	94
07	7199	172	189	27	9010	199	0990	93
08	7371	172	162	27	9209	199	0791	92
09	7542	171	135	27	9407	198	0593	91
0.2410	7714	172	108	27	9606	199	0394	0.7590
		171		27		199		
11	7885	172	081	27	9.599805	198	10.400195	89
12	8057	172	054	27	9.600003	198	10.399997	88
13	8228	171	9.968026	28	0202	199	9798	87
14	8399	171	9.967999	27	0400	198	9600	86
15	8570	171	972	27	0598	198	9402	85
		172		27		199		
16	8742	171	945	27	0797	198	9203	84
17	8913	171	918	27	0995	198	9005	83
18	9084	171	890	28	1193	198	8807	82
19	9255	170	863	27	1391	198	8609	81
0.2420	9425	171	836	27	1589	198	8411	0.7580
		171		27		198		
21	9596	170	809	28	1787	198	8213	79
22	9766	171	781	27	1985	198	8015	78
23	9.569937	171	754	27	2183	198	7817	77
24	9.570107	170	727	27	2381	198	7619	76
25	0278	171	9.967699	28	9.602578	197	10.397422	75
		170		27		198		
26	0448	170	672	27	2776	198	7224	74
27	0618	170	645	27	2974	197	7027	73
28	0788	170	617	28	3171	197	6829	72
29	0959	171	590	27	3369	198	6632	71
0.2430	1129	170	563	27	3566	197	6434	0.7570
		169		28		197		
31	1298	170	535	27	3763	197	6237	69
32	1468	170	508	27	3960	198	6040	68
33	1638	170	481	27	4158	198	5842	67
34	1808	170	453	28	4355	197	5645	66
35	1977	169	426	27	4552	197	5448	65
		170		28		197		
36	2147	169	398	27	4749	197	5251	64
37	2316	170	371	27	4946	197	5054	63
38	2486	170	343	28	5143	197	4858	62
39	2655	169	316	27	5339	196	4661	61
0.2440	2824	169	288	28	5536	197	4464	0.7560
		169		27		197		
41	2993	170	261	27	5733	197	4267	59
42	3163	168	233	28	5929	196	4071	58
43	3331	169	206	27	6126	197	3874	57
44	3500	169	178	28	6322	196	3678	56
45	3669	169	151	27	6519	197	3481	55
		169		28		196		
46	3838	169	123	27	6715	196	3285	54
47	4007	168	095	28	6911	196	3089	53
48	4175	169	068	27	7108	197	2893	52
49	4344	168	040	28	7304	196	2696	51
0.2450	9.574512		9.967013	27	9.607500	196	10.392500	0.7550
Arc.	Log. Cos.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0. 245.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
2450	9.574512	169	9.967013	28	9.607500	196	10.392500	0.7550
51	4681	168	9.966985	28	7696	196	2304	49
52	4849	168	957	27	7892	196	2108	48
53	5017	168	930	27	8088	196	1912	47
54	5185	169	902	28	8284	196	1717	46
55	5354	168	874	28	8479	195	1521	45
56	5522	167	847	27	8675	196	1325	44
57	5689	168	819	28	8871	196	1129	43
58	5857	168	791	28	9066	195	0934	42
59	6025	168	763	28	9262	196	0738	41
2460	6193	168	736	27	9457	195	0543	0.7540
61	6360	167	708	28	9653	196	0348	39
62	6528	168	680	28	9609848	195	10.390152	38
63	6695	167	652	28	9.610043	195	10.389957	37
64	6863	168	625	27	0238	196	9762	36
65	7030	167	597	28	0434	195	9567	35
66	7197	167	569	28	0629	195	9372	34
67	7365	168	541	28	0824	195	9177	33
68	7532	167	513	28	1019	194	8982	32
69	7699	167	485	28	1213	195	8787	31
2470	7866	167	457	27	1408	195	8592	0.7530
71	8033	166	430	28	1603	195	8397	29
72	8199	167	402	28	1798	194	8202	28
73	8366	167	374	28	1992	195	8008	27
74	8533	166	346	28	2187	194	7813	26
75	9.578699	167	9.966318	28	9.612381	195	10.387619	25
76	8866	166	290	28	2576	194	7424	24
77	9032	167	262	28	2770	195	7230	23
78	9199	166	234	28	2965	194	7035	22
79	9365	166	206	28	3159	194	6841	21
2480	9531	166	178	28	3353	194	6647	0.7520
81	9697	166	150	28	3547	194	6453	19
82	9.579863	166	122	28	3741	194	6259	18
83	9.580029	166	094	28	3935	194	6065	17
84	0195	166	066	28	4129	194	5871	16
85	0361	166	038	28	4323	194	5677	15
86	0527	165	9.966010	28	4517	194	5483	14
87	0692	166	9.965982	28	4711	194	5289	13
88	0858	166	954	29	4905	193	5096	12
89	1024	165	925	28	5098	194	4902	11
2490	1189	165	897	28	5292	193	4708	0.7510
91	1354	166	869	28	5485	194	4515	09
92	1520	165	841	28	5679	193	4321	08
93	1685	165	813	28	5872	194	4128	07
94	1850	165	785	28	6066	193	3935	06
95	2015	165	757	29	6259	193	3741	05
96	2180	165	728	28	6452	193	3548	04
97	2345	165	700	28	6645	193	3355	03
98	2510	165	672	28	6838	193	3162	02
2499	2675	165	644	28	7031	193	2969	01
2500	9.582840	165	9.965615	29	9.617224	193	10.382776	0.7500
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0. 750.

0. 250.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0. 2500	9.582840	164	9.965615	28	9.617224	193	10.382776	0.7500
01	3004	165	587	28	7417	193	2583	0.7499
02	3169	164	559	28	7610	193	2390	98
03	3333	165	531	29	7803	193	2197	97
04	3498	164	502	28	7996	192	2004	96
05	3662	165	474	28	8188	193	1812	95
06	3827	164	446	29	8381	193	1619	94
07	3991	164	417	28	8574	192	1427	93
08	4155	164	389	28	8766	192	1234	92
09	4319	164	361	29	8958	193	1042	91
0. 2510	4483	164	332	28	9151	192	0849	0.7490
11	4647	164	304	29	9343	192	0657	89
12	4811	164	275	28	9535	193	0465	88
13	4975	163	247	28	9728	192	0272	87
14	5138	164	219	29	9.619920	192	10.380080	86
15	5302	163	190	28	9.620112	192	10.379888	85
16	5465	164	162	29	0304	192	9696	84
17	5629	163	133	28	0496	192	9504	83
18	5792	164	105	28	0688	192	9312	82
19	5956	163	076	28	0880	191	9121	81
0. 2520	6119	163	048	29	1071	192	8929	0.7480
21	6282	163	9.965019	28	1263	192	8737	79
22	6445	163	9.964991	29	1455	191	8545	78
23	6608	163	962	28	1646	192	8354	77
24	6771	163	934	29	1838	191	8162	76
25	9.586934	163	905	29	9.622029	192	10.377971	75
26	7097	163	876	28	2221	191	7779	74
27	7260	163	848	29	2412	191	7588	73
28	7423	162	819	28	2603	192	7397	72
29	7585	163	791	29	2795	191	7205	71
0. 2530	7748	162	762	29	2986	191	7014	0.7470
31	7910	163	733	28	3177	191	6823	69
32	8073	162	705	29	3368	191	6632	68
33	8235	162	676	29	3559	191	6441	67
34	8397	163	647	28	3750	191	6250	66
35	8560	162	619	29	3941	191	6059	65
36	8722	162	590	28	4132	191	5868	64
37	8884	162	561	28	4323	190	5678	63
38	9046	162	533	29	4513	191	5487	62
39	9208	162	504	29	4704	191	5296	61
0. 2540	9370	161	475	29	4895	191	5106	0.7460
41	9531	162	446	29	5085	190	4915	59
42	9693	162	418	28	5276	191	4725	58
43	9.589855	161	389	29	5466	190	4534	57
44	9.590016	162	360	29	5656	190	4344	56
45	0178	161	331	29	5847	190	4153	55
46	0339	161	302	29	6037	190	3963	54
47	0500	162	273	28	6227	190	3773	53
48	0662	161	245	28	6417	190	3583	52
49	0823	161	216	29	6607	190	3393	51
0. 2550	9.590984	9.964187	9.964187	29	9.626797	190	10.373203	0.7450
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0. 745.

0. 255.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.2550	9.590984		9.964187		9.626797		10.373203	0.7450
51	1145	161	158	29	6987	190	3013	49
52	1306	161	129	29	7177	190	2823	48
53	1467	161	100	29	7367	190	2633	47
54	1628	161	071	29	7557	190	2443	46
55	1789	161	042	29	7747	190	2254	45
		160		29		189		
56	1949	161	9.964013	29	7936	190	2064	44
57	2110	161	9.963984	29	8126	189	1874	43
58	2271	160	955	29	8315	190	1685	42
59	2431	161	926	29	8505	189	1495	41
0.2560	2592	160	897	29	8694	190	1306	0.7440
		160		29		189		
61	2752	160	868	29	8884	189	1116	39
62	2912	161	839	29	9073	189	0927	38
63	3073	160	810	29	9262	190	0738	37
64	3233	160	781	29	9452	189	0549	36
65	3393	160	752	29	9641	189	0359	35
		160		29		189		
66	3553	160	723	29	9.629830	189	10.370170	34
67	3713	160	694	29	9.630019	189	10.369981	33
68	3873	159	665	29	0208	189	9792	32
69	4032	160	636	29	0397	189	9603	31
0.2570	4192	160	607	30	0586	189	9414	0.7430
		159		29		188		
71	4352	159	577	29	0775	188	9226	29
72	4511	160	548	29	0963	189	9037	28
73	4671	159	519	29	1152	189	8848	27
74	4830	160	490	29	1341	188	8659	26
75	9.594990	159	9.963461	30	9.631529	189	10.368471	25
		159		30		189		
76	5149	159	431	29	1718	188	8282	24
77	5308	160	402	29	1906	189	8094	23
78	5468	159	373	29	2095	188	7905	22
79	5627	159	344	29	2283	188	7717	21
0.2580	5786	159	315	29	2471	189	7529	0.7420
		159		30		188		
81	5945	159	285	29	2660	188	7341	19
82	6104	158	256	29	2848	188	7152	18
83	6262	159	227	30	3036	189	6964	17
84	6421	159	197	29	3224	188	6776	16
85	6580	159	168	29	3412	188	6588	15
		158		30		188		
86	6739	158	139	30	3600	188	6400	14
87	6897	159	109	29	3788	188	6212	13
88	7056	158	080	29	3976	188	6024	12
89	7214	158	051	29	4164	187	5837	11
0.2590	7372	159	9.963021	30	4351	188	5649	0.7410
		159		29		188		
91	7531	158	9.962992	30	4539	188	5461	09
92	7689	158	962	30	4727	187	5273	08
93	7847	158	933	29	4914	188	5086	07
94	8005	158	904	30	5102	187	4898	06
95	8163	158	874	29	5289	188	4711	05
		158		30		187		
96	8321	158	845	30	5477	187	4523	04
97	8479	158	815	29	5664	187	4336	03
98	8637	158	786	29	5851	188	4149	02
0.2599	8795	157	756	30	6039	188	3962	01
0.2600	9.598952	157	9.962727	29	9.636226	187	10.363774	0.7400
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0. 740.

0. 260.

Are.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Are.
0.2600	9.598952	158	9.962727	30	9.636226	187	10.363774	0.7400
01	9110	157	697	29	6413	187	3587	0.7399
02	9267	158	668	30	6600	187	3400	98
03	9425	157	638	30	6787	187	3213	97
04	9582	158	608	30	6974	187	3026	96
05	9740	157	579	29	7161	187	2839	95
06	9.599897	157	549	30	7348	187	2652	94
07	9.600054	157	520	29	7535	186	2466	93
08	0211	157	490	30	7721	187	2279	92
09	0368	157	460	30	7908	187	2092	91
0.2610	0525	157	431	29	8095	186	1905	0.7390
11	0682	157	401	30	8281	187	1719	89
12	0839	157	371	29	8468	186	1532	88
13	0996	157	342	30	8654	187	1346	87
14	1153	156	312	30	8841	186	1159	86
15	1309	157	282	29	9027	186	0973	85
16	1466	156	253	30	9213	187	0787	84
17	1622	157	223	30	9400	186	0600	83
18	1779	156	193	30	9586	186	0414	82
19	1935	157	163	29	9772	186	0228	81
0.2620	2092	156	134	30	9.639958	186	10.360042	0.7380
21	2248	156	104	30	9.640144	186	10.359856	79
22	2404	156	074	30	0330	186	9670	78
23	2560	156	044	30	0516	186	9484	77
24	2716	156	9.962014	29	0702	186	9298	76
25	9.602872	156	9.961985	30	0888	186	9112	75
26	3028	156	955	30	1074	185	8927	74
27	3184	156	925	30	1259	186	8741	73
28	3340	156	895	30	1445	186	8555	72
29	3496	155	865	30	1631	185	8370	71
0.2630	3651	156	835	30	1816	186	8184	0.7370
31	3807	155	805	30	2002	185	7999	69
32	3962	156	775	29	2187	185	7813	68
33	4118	155	746	30	2372	186	7628	67
34	4273	156	716	30	2558	185	7442	66
35	4429	155	686	30	2743	185	7257	65
36	4584	155	656	30	2928	185	7072	64
37	4739	155	626	30	3113	186	6887	63
38	4894	155	596	30	3299	185	6701	62
39	5049	155	566	30	3484	185	6516	61
0.2640	5204	155	536	30	3669	185	6331	0.7360
41	5359	155	506	30	3854	185	6146	59
42	5514	155	476	31	4039	184	5962	58
43	5669	155	445	30	4225	185	5777	57
44	5824	154	415	30	4408	185	5592	56
45	5978	155	385	30	4593	185	5407	55
46	6133	154	355	30	4778	184	5222	54
47	6287	155	325	30	4962	185	5038	53
48	6442	154	295	30	5147	185	4853	52
49	6596	155	265	30	5332	184	4669	51
0.2650	9.606751	155	9.961235	30	9.645516	184	10.354484	0.7350
Are.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Are.

0. 735.

0.265.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.2650	9.606751	154	9.961235	31	9.645516	184	10.354484	0.7350
51	6905	154	204	30	5700	185	4300	49
52	7039	154	174	30	5885	184	4115	48
53	7213	154	144	30	6060	184	3931	47
54	7367	154	114	30	6253	184	3747	46
55	7521	154	84	30	6438	185	3562	45
56	7675	154	053	31	6622	184	3378	44
57	7829	154	9.961023	30	6806	184	3194	43
58	7983	154	9.960993	30	6990	184	3010	42
59	8137	153	963	31	7174	184	2826	41
0.2660	8290	154	932	30	7358	184	2642	0.7340
61	8444	154	902	30	7542	184	2458	39
62	8598	153	872	31	7726	184	2274	38
63	8751	154	841	30	7910	183	2090	37
64	8905	153	811	30	8093	184	1907	36
65	9058	153	781	31	8277	184	1723	35
66	9211	153	750	30	8461	183	1539	34
67	9364	154	720	30	8644	184	1356	33
68	9518	153	690	31	8828	183	1172	32
69	9671	153	659	30	9011	184	0989	31
0.2670	9824	153	629	31	9195	183	0805	0.7330
71	9.609977	153	598	30	9378	184	0622	29
72	9.610130	152	568	30	9562	183	0438	28
73	0282	153	538	31	9745	183	0255	27
74	0435	153	507	30	9.649928	183	10.350072	26
75	0588	153	9.960477	31	9.650111	183	10.349889	25
76	0741	152	446	30	0294	184	9706	24
77	0893	153	416	31	0478	183	9523	23
78	1046	152	385	30	0661	183	9339	22
79	1198	153	355	31	0844	183	9157	21
0.2680	1351	152	324	30	1027	182	8974	0.7320
81	1503	152	294	31	1209	183	8791	19
82	1655	152	263	31	1392	183	8608	18
83	1807	153	232	30	1575	183	8425	17
84	1960	152	202	31	1758	182	8242	16
85	2112	152	171	30	1940	183	8060	15
86	2264	152	141	31	2123	183	7877	14
87	2416	151	110	31	2306	182	7694	13
88	2567	152	079	30	2488	183	7512	12
89	2719	152	049	31	2671	182	7329	11
0.2690	2871	152	9.960018	31	2853	182	7147	0.7310
91	3023	151	9.959987	30	3035	183	6965	09
92	3174	152	957	31	3218	182	6782	08
93	3326	151	926	31	3400	182	6600	07
94	3477	152	895	31	3582	182	6418	06
95	3629	151	864	30	3764	182	6236	05
96	3780	151	834	31	3946	183	6054	04
97	3931	152	803	31	4129	182	5872	03
98	4083	151	772	31	4311	182	5690	02
0.2699	4234	151	741	31	4493	181	5508	01
0.2700	9.614385	151	9.959711	30	9.654674	181	10.345326	0.7300

0.730.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
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0. 270.

Arc.	Log. Sin.	Diff.	Log. Cosin.	D.	Log. Tang.	Diff.	Log. Cot.	Arc.
0.2700	9.614385		9.959711		9.654674		10.345326	0.7300
01	536	151	680	31	4856	182	5144	0.7299
02	687	151	649	31	5038	182	4962	98
03	838	151	618	31	5220	182	4780	97
04	9.614989	151	587	31	5402	182	4598	96
05	9.615140	151	556	31	5583	181	4417	95
06	290	150	526	30	5765	182	4235	94
07	441	151	495	31	5946	181	4054	93
08	592	151	464	31	6128	182	3872	92
09	742	150	433	31	6309	181	3691	91
0.2710	9.615893	151	402	31	6491	182	3509	0.7290
11	9.616043	150	371	31	6672	181	3328	89
12	194	151	340	31	6854	182	3147	88
13	344	150	309	31	7035	181	2965	87
14	494	150	278	31	7216	181	2784	86
15	644	150	247	31	7397	181	2603	85
16	794	150	216	31	7578	181	2422	84
17	9.616944	150	185	31	7759	181	2241	83
18	9.617094	150	154	31	7940	181	2060	82
19	244	150	123	31	8121	181	1879	81
0.2720	394	150	92	31	8302	181	1698	0.7280
21	544	150	61	31	8483	181	1517	79
22	694	149	9.959030	31	8664	181	1336	78
23	843	150	9.958999	31	8845	180	1155	77
24	9.617993	150	9.958968	31	9025	181	0975	76
25	9.618143	149	937	32	9206	181	0794	75
26	292	149	905	31	9387	180	0613	74
27	441	150	874	31	9567	181	0433	73
28	591	149	843	31	9748	180	0252	72
29	740	148	812	31	9.659928	181	10.340072	71
0.2730	9.618889	150	781	31	9.660109	180	10.339891	0.7270
31	9.619039	149	750	32	0289	180	9711	69
32	188	149	718	31	0469	181	9531	68
33	337	149	687	31	0650	180	9350	67
34	486	149	656	31	0830	180	9170	66
35	635	149	625	31	1010	180	8990	65
36	784	148	593	31	1190	180	8810	64
37	9.619932	149	562	31	1370	180	8630	63
38	9.620081	149	531	31	1550	180	8450	62
39	230	148	500	32	1730	180	8270	61
0.2740	378	149	468	31	1910	180	8090	0.7260
41	527	148	437	31	2090	180	7910	59
42	675	149	406	32	2270	180	7730	58
43	824	148	374	31	2450	180	7550	57
44	9.620972	149	343	31	2629	179	7371	56
45	9.621121	148	311	31	2809	180	7191	55
46	269	148	280	31	2989	179	7011	54
47	417	148	249	32	3168	180	6832	53
48	565	148	217	31	3348	180	6652	52
49	713	148	186	31	3527	179	6473	51
0.2750	9.621861	148	9.958154	32	9.663707	180	10.336293	0.7250
Arc.	Log. Cosin.	Diff.	Log. Sin.	D.	Log. Cot.	Diff.	Log. Tang.	Arc.

0. 725.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.2750	9.621861	148	9.958154	31	9.663707	179	10.336293	0.7250
51	9.622009	148	123	31	3886	179	6114	49
52	157	148	091	32	4066	180	5934	48
53	305	148	060	31	4245	179	5755	47
54	453	148	9.958028	32	4424	179	5576	46
55	600	147	9.957997	31	4603	179	5397	45
		148		32		180		
56	748	148	965	31	4783	179	5217	44
57	9.622896	148	934	32	4962	179	5038	43
58	9.623043	147	902	32	5141	179	4859	42
59	191	148	871	31	5320	179	4680	41
0.2760	338	147	839	32	5499	179	4501	0.7240
		147		31		179		
61	485	148	808	32	5678	179	4322	39
62	633	148	776	32	5857	179	4144	38
63	780	147	744	32	6035	178	3965	37
64	9.623927	147	713	31	6214	179	3786	36
65	9.624074	147	681	32	6393	179	3607	35
		147		31		179		
66	221	147	650	32	6572	178	3428	34
67	368	147	618	32	6750	179	3250	33
68	515	147	586	32	6929	179	3071	32
69	662	147	554	32	7107	178	2893	31
0.2770	809	147	523	31	7286	179	2714	0.7230
		146		32		178		
71	9.624955	147	491	32	7464	179	2536	29
72	9.625102	147	459	31	7643	178	2357	28
73	249	146	428	32	7821	178	2179	27
74	395	147	396	32	7999	178	2001	26
75	542	147	9.957364	32	9.668178	179	10.331822	25
		146		32		178		
76	688	147	332	32	8356	178	1644	24
77	835	147	300	32	8534	178	1466	23
78	9.625981	146	269	31	8712	178	1288	22
79	9.626127	146	237	32	8890	178	1110	21
0.2780	273	146	205	32	9068	178	0932	0.7220
		146		32		178		
81	419	146	173	32	9246	178	0754	19
82	565	146	141	32	9424	178	0576	18
83	711	146	109	31	9602	178	0398	17
84	9.626857	146	078	32	9780	178	0220	16
85	9.627003	146	046	32	9.669958	178	10.330042	15
		145		32		177		
86	149	146	9.957014	32	9.670135	178	10.329865	14
87	295	146	9.956982	32	0313	178	9687	13
88	441	145	950	32	0491	178	9509	12
89	586	145	918	32	0668	177	9332	11
0.2790	732	145	886	32	0845	177	9154	0.7210
		145		32		178		
91	9.627877	146	854	32	1023	178	8977	09
92	9.628023	146	822	32	1201	178	8799	08
93	168	145	790	32	1378	177	8622	07
94	314	145	758	32	1556	178	8444	06
95	459	145	726	32	1733	177	8267	05
		145		32		177		
96	604	145	694	32	1910	178	8090	04
97	749	146	662	32	2088	177	7913	03
98	9.628895	145	630	32	2265	177	7735	02
0.2799	9.629040	145	598	32	2442	177	7558	01
0.2800	9.629185	145	9.956566	32	9.672619	177	10.327381	0.7200
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0. 280.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.2800	9.629185		9.956566		9.672619		10.327381	0.7200
01	330	145	534	32	2796	177	7204	0.7199
02	474	144	501	33	2973	177	7027	98
03	619	145	469	32	3150	177	6850	97
04	764	145	437	32	3327	177	6673	96
05	9.629909	145	405	32	3504	177	6496	95
06	9.630053	144	373	32	3681	177	6319	94
07	198	145	341	32	3857	176	6143	93
08	342	144	308	33	4034	177	5966	92
09	487	145	276	32	4211	177	5789	91
0.2810	631	144	244	32	4387	176	5613	0.7190
11	776	145	212	32	4564	177	5436	89
12	9.630920	144	179	33	4741	177	5260	88
13	9.631064	144	147	32	4917	176	5083	87
14	208	144	115	32	5094	177	4907	86
15	353	145	83	32	5270	176	4730	85
16	497	144	050	33	5446	176	4554	84
17	641	144	9.956018	32	5623	177	4377	83
18	785	144	9.955986	32	5799	176	4201	82
19	9.631928	143	953	33	5975	176	4025	81
0.2820	9.632072	144	921	32	6151	176	3849	0.7180
21	216	144	889	33	6327	177	3673	79
22	360	144	856	32	6504	176	3497	78
23	503	143	824	32	6680	176	3320	77
24	647	144	791	33	6856	176	3144	76
25	791	144	9.955759	32	9.677032	176	10.322909	75
26	9.632934	143	727	33	7207	175	2793	74
27	9.633077	143	694	32	7383	176	2617	73
28	221	143	662	33	7559	176	2441	72
29	364	143	629	32	7735	176	2265	71
0.2830	507	144	597	33	7911	175	2089	0.7170
31	651	143	564	32	8086	176	1914	69
32	794	143	532	33	8262	176	1738	68
33	9.633937	143	499	32	8438	175	1562	67
34	9.634080	143	467	33	8613	176	1387	66
35	223	143	434	33	8789	175	1211	65
36	366	142	401	32	8964	176	1036	64
37	508	143	369	33	9140	175	0861	63
38	651	143	336	32	9315	175	0685	62
39	794	143	304	33	9490	176	0510	61
0.2840	9.634937	142	271	33	9666	175	0335	0.7160
41	9.635079	143	238	32	9.679841	175	10.320159	59
42	222	142	206	33	9.680016	175	10.319984	58
43	364	143	173	32	0191	175	9809	57
44	507	142	140	32	0366	175	9634	56
45	649	142	108	33	0541	175	9459	55
46	791	143	075	33	0716	175	9284	54
47	9.635934	142	042	32	0891	175	9109	53
48	9.636076	142	9.955010	33	1066	175	8934	52
49	218	142	9.954977	33	1241	175	8759	51
0.2850	9.636360	142	9.954944	33	9.681416	175	10.318584	0.7150
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0. 715.

Q. 285.

Arg.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arg.
1,2850	9.636360	142	9.954944	33	9.681416	175	10.318584	0.7150
51	502	142	911	32	1591	175	8409	49
52	644	142	879	33	1766	174	8235	48
53	786	142	846	33	1940	175	8060	47
54	9.636928	142	813	33	2115	175	7885	46
55	9.637070	141	780	33	2290	174	7711	45
56	211	142	747	32	2464	175	7536	44
57	353	142	715	33	2639	174	7361	43
58	495	141	682	33	2813	175	7187	42
59	636	142	649	33	2988	174	7012	41
1,2860	778	141	616	33	3162	174	6838	0.7140
61	9.637919	142	583	33	3336	175	6664	39
62	9.638061	141	550	33	3511	174	6489	38
63	202	141	517	33	3685	174	6315	37
64	343	142	484	33	3859	174	6141	36
65	485	141	451	33	4033	175	5967	35
66	626	141	418	33	4208	174	5793	34
67	767	141	385	33	4382	174	5618	33
68	9.638908	141	352	33	4556	174	5444	32
69	9.639049	141	319	33	4730	174	5270	31
1,2870	190	141	286	33	4904	174	5096	0.7130
71	331	141	253	33	5078	174	4922	29
72	472	141	220	33	5252	173	4749	28
73	613	140	187	33	5425	174	4575	27
74	753	141	154	33	5599	174	4401	26
75	9.639894	141	121	33	9.685773	174	10.314227	25
76	9.640035	140	088	33	5947	173	4253	24
77	175	141	055	33	6120	174	3880	23
78	316	140	9.954022	33	6294	174	3706	22
79	456	141	9.953989	34	6468	173	3533	21
1,2880	597	140	955	33	6641	174	3359	0.7120
81	737	140	922	33	6815	173	3185	19
82	9.640877	140	889	33	6988	173	3012	18
83	9.641017	141	856	33	7161	174	2839	17
84	158	140	823	33	7335	173	2665	16
85	298	140	790	34	7508	173	2492	15
86	438	140	756	33	7681	174	2319	14
87	578	140	723	33	7855	173	2145	13
88	718	140	690	33	8028	173	1972	12
89	858	139	657	34	8201	173	1799	11
1,2890	9.641997	140	623	33	8374	173	1626	0.7110
91	9.642137	140	590	33	8547	173	1453	09
92	277	140	557	34	8720	173	1280	08
93	417	139	523	33	8893	173	1107	07
94	556	140	490	33	9066	173	0934	06
95	696	139	457	34	9239	173	0761	05
96	835	140	423	33	9412	173	0588	04
97	9.642975	139	390	33	9585	173	0415	03
98	9.643114	139	357	34	9758	172	0243	02
1,2900	253	140	323	33	9.689930	173	10.310070	01
1,2900	9.643393	140	9.953290	33	9.690103	173	10.309897	0.7100
Arg.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arg.

Q. 710.

0. 290.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.2900	9.643393	139	9.953290	34	9.690103	173	10.309897	0.7100
01	532	139	256	33	0276	172	9724	0.7099
02	671	139	223	34	0448	173	9552	98
03	810	139	189	33	0621	172	9379	97
04	9.643949	139	156	34	0793	173	9207	96
05	9.644088	139	122	33	0966	172	9034	95
06	227	139	089	34	1138	173	8862	94
07	366	139	055	33	1311	172	8689	93
08	505	139	9.953022	34	1483	172	8517	92
09	644	139	9.952988	33	1655	173	8345	91
0.2910	782	139	955	34	1828	172	8172	0.7090
11	9.644921	139	921	33	2000	172	8000	89
12	9.645060	138	888	34	2172	172	7828	88
13	198	139	854	33	2344	172	7656	87
14	337	138	821	34	2516	172	7484	86
15	475	139	787	33	2688	172	7312	85
16	614	138	753	33	2860	172	7140	84
17	752	138	720	34	3032	172	6968	83
18	9.645890	139	686	34	3204	172	6796	82
19	9.646029	138	652	33	3376	172	6624	81
0.2920	167	138	619	34	3548	172	6452	0.7080
21	305	138	585	34	3720	172	6280	79
22	443	138	551	33	3892	171	6108	78
23	581	138	518	34	4063	172	5937	77
24	719	138	484	34	4235	172	5765	76
25	857	138	9.952450	34	9.694407	172	5593	75
26	9.646995	137	416	33	4578	172	5422	74
27	9.647132	138	383	34	4750	171	5250	73
28	270	138	349	34	4921	172	5079	72
29	408	137	315	34	5093	171	4907	71
0.2930	545	138	281	34	5264	172	4736	0.7070
31	683	138	247	34	5436	171	4564	69
32	821	137	213	33	5607	171	4393	68
33	9.647958	137	180	34	5778	172	4222	67
34	9.648095	138	146	34	5950	171	4050	66
35	233	137	112	34	6121	171	3879	65
36	370	137	078	34	6292	171	3708	64
37	507	138	044	34	6463	172	3537	63
38	645	137	9.952010	34	6635	171	3366	62
39	782	137	9.951976	34	6806	171	3195	61
0.2940	9.648919	137	942	34	6977	171	3023	0.7060
41	9.649056	137	908	34	7148	171	2852	59
42	193	137	874	34	7319	170	2682	58
43	330	137	840	34	7489	171	2511	57
44	467	136	806	34	7660	171	2340	56
45	603	137	772	34	7831	171	2169	55
46	740	137	738	34	8002	171	1998	54
47	9.649877	137	704	34	8173	170	1827	53
48	9.650014	136	670	34	8343	171	1657	52
49	150	137	636	34	8514	171	1486	51
0.2950	9.650287	137	9.951602	34	9.698685	171	10.301315	0.7050
Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.

0. 705.

0. 295.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.2950	9.650287	136	9.951602	34	9.698685	170	10.301315	0.7050
51	423	137	568	34	8855	171	1145	49
52	560	136	534	34	9026	170	0974	48
53	696	136	500	34	9196	171	0804	47
54	832	137	466	35	9367	170	0633	46
55	9.650969	136	431	34	9537	171	0463	45
56	9.651105	136	397	34	9708	170	0292	44
57	241	136	363	34	9.699878	170	10.300122	43
58	377	136	329	34	9.700048	171	10.299952	42
59	513	136	295	34	0219	170	9781	41
0.2960	649	136	261	35	0389	170	9611	0.7040
61	785	136	226	34	0559	170	9441	39
62	9.651921	136	192	34	0729	170	9271	38
63	9.652057	136	158	34	0899	170	9101	37
64	193	136	124	35	1069	170	8931	36
65	329	135	089	34	1239	170	8761	35
66	464	136	055	34	1409	170	8591	34
67	600	136	9.951021	35	1579	170	8421	33
68	736	135	9.950986	34	1749	170	8251	32
69	9.652871	136	952	34	1919	170	8081	31
0.2970	9.653007	135	918	35	2089	170	7911	0.7030
71	142	135	883	34	2259	170	7741	29
72	277	136	849	34	2429	169	7571	28
73	413	135	815	35	2598	170	7402	27
74	548	135	780	34	2768	170	7232	26
75	683	135	9.950746	35	9.702938	169	10.297062	25
76	818	136	711	34	3107	170	6893	24
77	9.653954	135	677	35	3277	169	6723	23
78	9.654089	135	642	34	3446	170	6554	22
79	224	135	608	35	3616	169	6384	21
0.2980	359	135	573	34	3785	170	6215	0.7020
81	494	134	539	35	3955	169	6045	19
82	628	135	504	34	4124	169	5876	18
83	763	135	470	35	4293	170	5707	17
84	9.654898	135	435	34	4463	169	5537	16
85	9.655033	134	401	35	4632	169	5368	15
86	167	135	366	34	4801	169	5199	14
87	302	134	332	35	4970	169	5030	13
88	436	135	297	35	5139	169	4861	12
89	571	134	262	34	5308	170	4692	11
0.2990	705	135	228	35	5478	169	4523	0.7010
91	840	134	193	34	5647	169	4354	09
92	9.655974	134	159	35	5816	168	4185	08
93	9.656108	135	124	35	5984	169	4016	07
94	243	134	089	34	6153	169	3847	06
95	377	134	055	35	6322	169	3678	05
96	511	134	9.950020	35	6491	169	3509	04
97	645	134	9.949985	35	6660	169	3340	03
98	779	134	950	34	6829	168	3172	02
0.2999	9.656913	134	916	35	6997	169	3003	01
0.3000	9.657047	134	9.949881	35	9.707166	169	10.292834	0.7000
Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.

0. 700.

0. 300.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.3000	9.657047	134	9.949881	35	9.707166	169	10.292834	0.7000
01	181	133	846	35	7335	168	2666	0.6999
02	314	134	811	34	7503	169	2497	98
03	448	134	777	35	7672	168	2328	97
04	582	134	742	35	7840	169	2160	96
05	716	133	707	35	8009	168	1991	95
06	849	134	672	35	8177	169	1823	94
07	9.657983	133	637	35	8346	168	1655	93
08	9.658116	134	602	34	8514	168	1486	92
09	250	133	568	35	8682	168	1318	91
0.3010	383	133	533	35	8850	169	1150	0.6990
11	516	134	498	35	9019	168	0981	89
12	650	133	463	35	9187	168	0813	88
13	783	133	428	35	9355	168	0645	87
14	9.658916	133	393	35	9523	168	0477	86
15	9.659049	133	358	35	9691	168	0309	85
16	182	133	323	35	9.709859	168	10.290141	84
17	315	133	288	35	9.710027	168	10.289973	83
18	448	133	253	35	0195	168	9805	82
19	581	133	218	35	0363	168	9637	81
0.3020	714	133	183	35	0531	168	9469	0.6980
21	847	133	148	35	0699	168	9301	79
22	9.659980	133	113	35	0867	168	9133	78
23	9.660113	132	078	35	1035	167	8965	77
24	245	133	043	35	1202	168	8798	76
25	378	132	9.949008	35	9.711370	168	10.288630	75
26	510	133	9.948973	35	1538	167	8462	74
27	643	132	938	36	1705	168	8295	73
28	775	133	902	35	1873	168	8127	72
29	9.660908	132	867	35	2041	167	7959	71
0.3030	9.661040	132	832	35	2208	168	7792	0.6970
31	172	133	797	35	2376	167	7624	69
32	305	132	762	35	2543	167	7457	68
33	437	132	727	36	2710	168	7290	67
34	569	132	691	35	2878	167	7122	66
35	701	132	656	35	3045	168	6955	65
36	833	132	621	35	3213	167	6788	64
37	9.661965	132	586	36	3380	167	6620	63
38	9.662097	132	550	35	3547	167	6453	62
39	229	132	515	35	3714	167	6286	61
0.3040	361	132	480	36	3881	167	6119	0.6960
41	493	132	444	35	4048	168	5952	59
42	625	131	409	35	4216	167	5785	58
43	756	132	374	36	4383	167	5618	57
44	9.662888	132	338	35	4550	167	5451	56
45	9.663020	131	303	35	4717	166	5284	55
46	151	132	268	36	4883	167	5117	54
47	283	131	232	35	5050	167	4950	53
48	414	131	197	36	5217	167	4783	52
49	545	132	161	35	5384	167	4616	51
0.3050	9.663677	132	9.948126	35	9.715551	167	10.284449	0.6950
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0. 695.

0.305.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.3050	9.663677	131	9.948126	35	9.715551	167	10.284449	0.6950
51	808	131	091	36	5718	167	4283	49
52	9.663939	131	055	35	5884	166	4116	48
53	9.664071	132	9.948020	36	6051	167	3969	47
54	202	131	9.947984	35	6218	167	3783	46
55	333	131	949	36	6384	166	3616	45
56	464	131	913	35	6551	167	3449	44
57	595	131	878	36	6717	166	3283	43
58	726	131	842	35	6884	167	3116	42
59	857	131	807	36	7050	166	2950	41
0.3060	9.664988	130	771	36	7217	167	2783	0.6940
61	9.665118	131	735	35	7383	166	2617	39
62	249	131	700	36	7549	167	2451	38
63	380	130	664	35	7716	166	2284	37
64	510	131	629	36	7882	166	2118	36
65	641	131	593	36	8048	166	1952	35
66	772	130	557	35	8214	167	1786	34
67	9.665902	131	522	36	8381	166	1620	33
68	9.666033	130	486	36	8547	166	1453	32
69	163	130	450	35	8713	166	1287	31
0.3070	293	131	415	36	8879	166	1121	0.6930
71	424	130	379	36	9045	166	0955	29
72	554	130	343	36	9211	166	0789	28
73	684	130	307	35	9377	166	0623	27
74	814	130	272	36	9543	165	0457	26
75	9.666944	130	9.947236	36	9708	166	0292	25
76	9.667074	130	200	36	9.719874	166	10.280126	24
77	204	130	164	36	9.720040	166	10.279960	23
78	334	130	128	35	0206	166	9794	22
79	464	130	093	36	0372	165	9628	21
0.3080	594	130	057	36	0537	166	9463	0.6920
81	724	130	9.947021	36	0703	166	9297	19
82	854	129	9.946985	36	0869	165	9132	18
83	9.667983	130	949	36	1034	166	8966	17
84	9.668113	130	913	36	1200	165	8800	16
85	243	129	877	36	1365	166	8635	15
86	372	130	841	35	1531	165	8469	14
87	502	129	806	36	1696	166	8304	13
88	631	130	770	36	1862	165	8139	12
89	761	129	734	36	2027	165	7973	11
0.3090	9.668890	129	698	36	2192	166	7808	0.6910
91	9.669019	129	662	36	2358	165	7643	09
92	148	130	626	36	2523	165	7477	08
93	278	129	590	36	2688	165	7312	07
94	407	129	554	36	2853	165	7147	06
95	536	129	518	36	3018	166	6982	05
96	665	129	482	37	3184	165	6817	04
97	794	129	445	36	3349	165	6651	03
98	9.669923	129	409	36	3514	165	6486	02
0.3099	9.670052	129	373	36	3679	165	6321	01
0.3100	9.670181	129	9.946337	36	9.723844	165	10.276156	0.6900
Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.

0.690.

0.310.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.3100	9.670181	128	9.946337	36	9.723844	165	10.276156	0.6900
01	309	129	301	36	4009	165	5991	0.6899
02	438	129	265	36	4174	164	5827	98
03	567	129	229	36	4338	165	5662	97
04	696	129	193	37	4503	165	5497	96
05	824	128	156	37	4668	165	5332	95
		129		36		165		
06	9.670953	128	120	36	4833	165	5167	94
07	9.671081	128	084	36	4998	164	5003	93
08	210	129	048	36	5162	165	4838	92
09	338	129	9.946012	37	5327	165	4673	91
0.3110	467	128	9.945975	36	5492	164	4509	0.6890
		128		36		165		
11	595	128	939	36	5656	165	4344	89
12	723	129	903	37	5821	164	4179	88
13	852	128	866	36	5985	165	4015	87
14	9.671980	128	830	36	6150	164	3850	86
15	9.672108	128	794	37	6314	165	3686	85
		128		36		164		
16	236	128	757	36	6479	164	3522	84
17	364	128	721	36	6643	164	3357	83
18	492	128	685	37	6807	165	3193	82
19	620	128	648	36	6972	164	3028	81
0.3120	748	128	612	36	7136	164	2864	0.6880
		128		36		165		
21	9.672876	128	576	37	7300	164	2700	79
22	9.673004	127	539	36	7464	165	2536	78
23	131	128	503	37	7629	164	2372	77
24	259	128	466	36	7793	164	2207	76
25	387	127	9.945430	37	9.72797	164	10.272043	75
		128		36		164		
26	514	128	393	36	8121	164	1879	74
27	642	127	357	37	8285	164	1715	73
28	769	128	320	36	8449	164	1551	72
29	9.673897	127	284	37	8613	164	1387	71
0.3130	9.674024	127	247	37	8777	164	1223	0.6870
		128		36		164		
31	152	127	211	37	8941	164	1059	69
32	279	127	174	36	9105	163	0895	68
33	406	127	138	37	9268	164	0732	67
34	533	127	101	36	9432	164	0568	66
35	660	127	065	36	9596	164	0404	65
		128		37		164		
36	788	127	9.945028	37	9760	163	0240	64
37	9.674915	127	9.944991	36	9.729923	164	10.270077	63
38	9.675042	127	955	37	9.730087	164	10.269913	62
39	169	127	918	37	0251	163	9749	61
0.3140	296	127	881	37	0414	164	9586	0.6860
		127		36		164		
41	423	126	845	37	0578	163	9422	59
42	549	127	808	37	0741	164	9259	58
43	676	127	771	36	0905	163	9095	57
44	803	127	735	37	1068	164	8932	56
45	9.675930	126	698	37	1232	163	8768	55
		126		37		163		
46	9.676056	127	661	37	1395	164	8605	54
47	183	126	624	36	1559	163	8442	53
48	309	127	588	37	1722	163	8278	52
49	436	127	551	37	1885	163	8115	51
0.3150	9.676562	126	9.944514	37	9.732048	163	10.267952	0.6850
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.685.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.3150	9.676562	127	9.944514	37	9.732048	164	10.267952	0.6850
51	680	126	477	37	2212	163	7788	49
52	815	126	440	37	2375	163	7625	48
53	9.676941	126	403	37	2538	163	7462	47
54	9.677068	126	367	37	2701	163	7299	46
55	194	126	330	37	2864	163	7136	45
56	320	126	293	37	3027	163	6973	44
57	446	126	256	37	3190	163	6810	43
58	572	126	219	37	3353	163	6647	42
59	698	126	182	37	3516	163	6484	41
0.3160	824	126	145	37	3679	163	6321	0.6840
61	9.677950	126	108	37	3842	163	6158	39
62	9.678076	126	071	37	4005	163	5995	38
63	202	126	9.944034	37	4168	163	5832	37
64	328	126	9.943997	37	4331	162	5670	36
65	453	126	960	37	4493	163	5507	35
66	579	126	923	37	4656	163	5344	34
67	705	125	886	37	4819	162	5181	33
68	830	126	849	37	4981	163	5019	32
69	9.678956	126	812	37	5144	163	4856	31
0.3170	9.679082	125	775	37	5307	162	4694	0.6830
71	207	125	738	37	5469	163	4531	29
72	332	126	701	37	5632	162	4368	28
73	458	125	664	37	5794	163	4206	27
74	583	125	627	37	5957	162	4044	26
75	708	126	9.943589	38	9.736119	162	10.263881	25
76	834	125	552	37	6281	163	3719	24
77	9.679959	125	515	37	6444	162	3556	23
78	9.680084	125	478	37	6606	162	3394	22
79	209	125	441	38	6768	163	3232	21
0.3180	334	125	403	37	6931	162	3069	0.6820
81	459	125	366	37	7093	162	2907	19
82	584	125	329	37	7255	162	2745	18
83	709	125	292	38	7417	162	2583	17
84	834	125	254	37	7579	162	2421	16
85	9.680959	124	217	37	7741	162	2259	15
86	9.681083	125	180	37	7903	163	2097	14
87	208	125	143	38	8066	162	1935	13
88	333	124	105	37	8228	161	1773	12
89	457	125	068	37	8389	162	1611	11
0.3190	582	124	9.943031	38	8551	162	1449	0.6810
91	706	125	9.942993	37	8713	162	1287	09
92	831	124	956	38	8875	162	1125	08
93	9.681955	125	918	37	9037	162	0963	07
94	9.682080	124	881	37	9199	162	0801	06
95	204	124	844	38	9361	161	0640	05
96	328	125	806	37	9522	162	0478	04
97	453	124	769	38	9684	162	0316	03
98	577	124	731	37	9.739846	161	10.260154	02
0.3199	701	124	694	37	9.740007	162	10.259993	01
0.3200	9.682825	124	9.942656	38	9.740169	162	10.259831	0.6800
Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.

0.320.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.3200	9.682825		9.942656		9.740169		10.259831	0.6800
01	9.682949	124	619	37	0331	162	9670	0.6799
02	9.683073	124	581	38	0492	161	9508	98
03	197	124	544	37	0654	162	9347	97
04	321	124	506	38	0815	161	9185	96
05	445	124	468	38	0977	162	9024	95
06	569	124	431	37	1138	161	8862	94
07	693	124	393	38	1299	161	8701	93
08	816	123	356	37	1461	162	8539	92
09	9.683940	124	318	38	1622	161	8378	91
0.3210	9.684064	124	280	38	1783	161	8217	0.6790
11	187	123	243	37	1945	162	8056	89
12	311	124	205	38	2106	161	7894	88
13	434	123	167	38	2267	161	7733	87
14	558	124	130	37	2428	161	7572	86
15	681	123	92	38	2589	161	7411	85
16	805	124	054	37	2750	161	7250	84
17	9.684928	123	9.942017	37	2911	161	7089	83
18	9.685051	123	9.941979	38	3072	161	6928	82
19	174	123	941	38	3233	161	6767	81
0.3220	298	124	903	38	3394	161	6606	0.6780
21	421	123	866	37	3555	161	6445	79
22	544	123	828	38	3716	161	6284	78
23	667	123	790	38	3877	161	6123	77
24	790	123	752	38	4038	161	5962	76
25	9.685913	123	9.941714	38	9.744199	161	10.255801	75
26	9.686036	123	676	38	4360	160	5641	74
27	159	123	638	37	4520	161	5480	73
28	282	122	601	38	4681	161	5319	72
29	404	123	563	38	4842	160	5158	71
0.3230	527	123	525	38	5002	161	4998	0.6770
31	650	122	487	38	5163	161	4837	69
32	772	123	449	38	5324	160	4676	68
33	9.686895	123	411	38	5484	161	4516	67
34	9.687018	122	373	38	5645	160	4355	66
35	140	123	335	38	5805	161	4195	65
36	263	122	297	38	5966	160	4034	64
37	385	122	259	38	6126	161	3874	63
38	507	123	221	38	6287	160	3714	62
39	630	122	183	38	6447	160	3553	61
0.3240	752	122	145	38	6607	161	3393	0.6760
41	874	122	107	38	6768	160	3233	59
42	9.687996	123	069	38	6928	160	3072	58
43	9.688119	122	9.941031	39	7088	160	2912	57
44	241	122	9.940992	38	7248	160	2752	56
45	363	122	954	38	7408	161	2592	55
46	485	122	916	38	7569	160	2431	54
47	607	122	878	38	7729	160	2271	53
48	729	122	840	38	7889	160	2111	52
49	851	122	802	38	8049	160	1951	51
0.3250	9.688972	121	9.940763	39	9.748209	160	10.251791	0.6750
Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.

0.675.

0.325.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.3250	9.688972	122	9.940763	38	9.748209	160	10.251791	0.6750
51	9.689094	122	725	38	8369	160	1631	49
52	216	122	687	38	8520	160	1471	48
53	338	122	649	38	8689	160	1311	47
54	459	121	611	38	8849	160	1151	46
55	581	122	572	39	9009	160	0991	45
		121		38		159		
56	702	122	534	38	9168	160	0832	44
57	824	121	496	39	9328	160	0672	43
58	9.689945	122	457	38	9488	160	0512	42
59	9.691067	121	419	38	9648	160	0352	41
0.3260	188	121	381	38	9808	160	0193	0.6740
		122		39		159		
61	310	121	342	38	9.749967	160	10.250033	39
62	431	121	304	38	9.750127	160	10.249873	38
63	552	121	266	38	0287	159	9714	37
64	673	122	227	38	0446	160	9554	36
65	795	121	189	39	0606	159	9394	35
66	9.690916	121	150	38	0765	160	9235	34
67	9.691037	121	112	38	0925	159	9075	33
68	158	121	074	38	1084	160	8916	32
69	279	121	9.940035	39	1244	159	8756	31
0.3270	400	121	9.939997	39	1403	160	8597	0.6730
		120		38		159		
71	521	120	958	38	1563	159	8438	29
72	641	121	920	39	1722	159	8278	28
73	762	121	881	38	1881	160	8119	27
74	9.691883	121	843	39	2041	159	7960	26
75	9.692004	120	804	39	9.752200	159	10.247800	25
		121		38		159		
76	124	121	765	38	2359	159	7641	24
77	245	121	727	39	2518	159	7482	23
78	366	120	688	38	2677	160	7323	22
79	486	121	650	39	2837	159	7163	21
0.3280	607	120	611	39	2996	159	7004	0.6720
		121		38		159		
81	727	121	572	38	3155	159	6845	19
82	848	120	534	39	3314	159	6686	18
83	9.692968	120	495	39	3473	159	6527	17
84	9.693088	121	456	39	3632	159	6368	16
85	209	120	418	38	3791	159	6209	15
		121		39		159		
86	329	120	379	39	3950	159	6050	14
87	449	120	340	38	4109	159	5891	13
88	569	120	302	39	4268	158	5732	12
89	689	120	263	39	4426	159	5574	11
0.3290	809	120	224	39	4585	159	5415	0.6710
		121		38		159		
91	9.693929	120	185	39	4744	159	5256	09
92	9.694049	120	146	38	4903	159	5097	08
93	169	120	108	39	5062	158	4939	07
94	289	120	069	39	5220	159	4780	06
95	409	120	9.939030	39	5379	159	4621	05
		119		38		158		
96	529	119	9.938991	39	5538	158	4462	04
97	648	120	952	39	5696	159	4304	03
98	768	120	913	38	5855	158	4145	02
0.3299	9.694888	119	875	39	6013	159	3987	01
0.3300	9.695007		9.938836	39	9.756172		10.243828	0.6700
Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.

0.670.

0.330.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.3300	9.695007	120	9.938836	39	9.756172	158	10.243828	0.6700
01	127	120	797	39	6330	159	3670	0.6699
02	247	120	758	39	6489	158	3511	98
03	366	119	719	39	6647	159	3353	97
04	486	120	680	39	6806	158	3194	96
05	605	119	641	39	6964	158	3036	95
06	724	119	602	39	7122	159	2878	94
07	844	120	563	39	7281	158	2719	93
08	9.695963	119	524	39	7439	158	2561	92
09	9.696082	119	485	39	7597	159	2403	91
0.3310	201	119	446	39	7756	158	2245	0.6690
11	320	120	407	39	7914	158	2086	89
12	440	119	368	39	8072	158	1928	88
13	559	119	329	39	8230	158	1770	87
14	678	119	289	40	8388	158	1612	86
15	797	119	250	39	8546	158	1454	85
16	9.696916	118	211	39	8704	158	1296	84
17	9.697034	119	172	39	8862	158	1138	83
18	153	119	133	39	9020	158	0980	82
19	272	119	94	39	9178	158	0822	81
0.3320	391	118	055	40	9336	158	0664	0.6680
21	509	119	9.938015	39	9494	158	0506	79
22	628	119	9.937976	39	9652	158	0348	78
23	747	118	937	39	9810	158	0190	77
24	865	118	898	39	9.759968	158	10.240032	76
25	9.697984	119	858	40	9.760126	157	10.239875	75
26	9.698102	118	819	39	0283	158	9717	74
27	221	118	780	39	0441	158	9559	73
28	339	119	741	40	0599	157	9401	72
29	458	118	701	39	0756	158	9244	71
0.3330	576	118	662	39	0914	158	9086	0.6670
31	694	118	623	39	1072	157	8928	69
32	812	119	583	40	1229	158	8771	68
33	9.698931	118	544	39	1387	157	8613	67
34	9.699049	118	504	40	1544	158	8456	66
35	167	118	465	39	1702	157	8298	65
36	285	118	426	39	1859	158	8141	64
37	403	118	386	40	2017	157	7983	63
38	521	118	347	39	2174	158	7826	62
39	639	118	307	40	2332	157	7668	61
0.3340	757	118	268	39	2489	157	7511	0.6660
41	875	117	228	40	2646	158	7354	59
42	9.699992	118	189	39	2804	157	7196	58
43	9.700110	118	149	40	2961	157	7039	57
44	228	118	110	39	3118	158	6882	56
45	346	117	070	40	3276	157	6725	55
46	463	118	9.937031	39	3433	157	6567	54
47	581	117	9.936991	40	3590	157	6410	53
48	698	118	951	39	3747	157	6253	52
49	816	117	912	39	3904	157	6096	51
0.3350	9.700933	117	9.936872	40	9.764061	157	10.235939	0.6650
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.665.

o. 335.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.3350	9.700933		9.936872		9.764061		10.235939	0.6650
51	9.701051	118	833	39	4218	157	5782	49
52	168	117	793	40	4375	157	5625	48
53	286	118	753	40	4532	157	5468	47
54	403	117	714	39	4689	157	5311	46
55	520	117	674	40	4846	157	5154	45
56	637	117	634	40	5003	157	4997	44
57	755	118	595	39	5160	157	4840	43
58	872	117	555	40	5317	157	4683	42
59	9.701989	117	515	40	5474	157	4526	41
0.3360	9.702106	117	475	40	5631	156	4370	0.6640
61	223	117	436	39	5787	156	4213	39
62	340	117	396	40	5944	157	4056	38
63	457	117	356	40	6101	156	3899	37
64	574	117	316	40	6257	156	3743	36
65	690	116	276	40	6414	157	3586	35
66	807	117	236	40	6571	157	3429	34
67	9.702924	117	197	39	6727	156	3273	33
68	9.703041	117	157	40	6884	157	3116	32
69	157	116	117	40	7041	156	2960	31
0.3370	274	117	077	40	7197	156	2803	0.6630
71	390	116	9.936037	40	7354	157	2647	29
72	507	117	9.935997	40	7510	156	2490	28
73	624	117	957	40	7666	156	2334	27
74	740	116	917	40	7823	157	2177	26
75	856	116	877	40	9.767979	156	2021	25
76	9.703973	117	837	40	8136	157	1864	24
77	9.704089	116	797	40	8292	156	1708	23
78	205	116	757	40	8448	156	1552	22
79	322	117	717	40	8605	157	1396	21
0.3380	438	116	677	40	8761	156	1239	0.6620
81	554	116	637	40	8917	156	1083	19
82	670	116	597	40	9073	156	0927	18
83	786	116	557	40	9229	157	0771	17
84	9.704992	116	517	40	9386	156	0615	16
85	9.705018	116	477	40	9542	156	0458	15
86	134	116	436	41	9698	156	0302	14
87	250	116	396	40	9.769854	156	10.230146	13
88	366	116	356	40	9.770010	156	10.229900	12
89	482	116	316	40	0166	156	9834	11
0.3390	598	115	276	40	0322	156	9678	0.6610
91	713	115	236	40	0478	156	9522	09
92	829	116	195	41	0634	156	9366	08
93	9.705945	115	155	40	0790	155	9210	07
94	9.706600	116	115	40	0945	156	9055	06
95	176	115	075	41	1101	156	8899	05
96	291	116	9.935034	40	1257	156	8743	04
97	407	115	9.934994	40	1413	156	8587	03
98	522	116	954	41	1569	155	8431	02
0.3399	638	115	913	40	1724	156	8276	01
0.3400	9.706753	115	9.934873	40	9.771880	156	10.228120	0.6600
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

o. 660.

o. 340.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.3400	9.706753	115	9.934873	40	9.771880	156	10.228120	0.6600
01	868	115	833	40	2036	155	7964	0.6599
02	9.706984	115	792	41	2191	156	7809	98
03	9.707099	115	752	40	2347	156	7653	97
04	214	115	712	40	2503	155	7497	96
05	329	115	671	41	2658	155	7342	95
		115		40		156		
06	445	115	631	41	2814	155	7186	94
07	560	115	590	40	2969	156	7031	93
08	675	115	550	41	3125	155	6875	92
09	790	115	509	40	3280	155	6720	91
0.3410	9.707905	115	469	40	3436	156	6564	0.6590
		115		41		155		
11	9.708020	115	428	40	3591	156	6409	89
12	134	115	388	41	3747	155	6254	88
13	249	115	347	40	3902	155	6098	87
14	364	115	307	41	4057	156	5943	86
15	479	115	266	40	4213	155	5788	85
		115		41		156		
16	594	115	226	40	4368	155	5632	84
17	708	115	185	41	4523	155	5477	83
18	823	115	145	40	4678	155	5322	82
19	9.708937	115	104	41	4834	156	5167	81
0.3420	9.709052	115	063	40	4989	155	5011	0.6580
		115		41		156		
21	166	115	9.934023	40	5144	155	4856	79
22	281	115	9.933982	41	5299	155	4701	78
23	395	114	941	40	5454	155	4546	77
24	510	114	901	41	5609	155	4391	76
25	624	114	860	40	5764	155	4236	75
		114		41	9.775764	155	10.224236	
26	738	114	819	40	5919	155	4081	74
27	853	114	778	41	6074	155	3926	73
28	9.709967	114	738	40	6229	155	3771	72
29	9.710081	114	697	41	6384	155	3616	71
0.3430	195	114	656	40	6539	155	3461	0.6570
		114		41		155		
31	309	114	615	40	6694	155	3306	69
32	423	114	575	41	6849	155	3151	68
33	537	114	534	40	7004	155	2996	67
34	651	114	493	41	7158	154	2842	66
35	765	114	452	40	7313	155	2687	65
		113		41		155		
36	879	113	411	40	7468	155	2532	64
37	9.710993	113	370	41	7623	154	2377	63
38	9.711107	113	330	40	7777	155	2223	62
39	221	113	289	41	7932	155	2068	61
0.3440	334	113	248	40	8087	155	1913	0.6560
		113		41		154		
41	448	113	207	40	8241	155	1759	59
42	562	113	166	41	8396	155	1604	58
43	675	113	125	40	8551	154	1450	57
44	789	113	084	41	8705	155	1295	56
45	9.711902	113	043	40	8860	155	1140	55
		113		41		154		
46	9.712016	113	9.933002	40	9014	155	0986	54
47	129	113	9.932961	41	9169	154	0831	53
48	243	113	920	40	9323	154	0677	52
49	356	113	879	41	9477	155	0523	51
0.3450	9.712470	113	9.932838	40	9.779632	155	10.220368	0.6550
Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.

o. 655.

o. 345.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
o. 3450	9.712470	113	9.932838	41	9.779632	154	10.220368	o. 6550
51	583	113	797	41	9786	154	0214	49
52	696	113	756	41	9.779941	155	10.220060	48
53	809	113	714	42	9.780095	154	10.219905	47
54	9.712922	113	673	41	0249	154	9751	46
55	9.713036	114	632	41	0403	154	9597	45
		113		41		155		
56	149	113	591	41	0558	154	9442	44
57	262	113	550	41	0712	154	9288	43
58	375	113	509	41	0866	154	9134	42
59	488	113	467	42	1020	154	8980	41
o. 3460	601	113	426	41	1174	154	8826	o. 6540
		113		41		155		
61	714	112	385	41	1329	154	8672	39
62	826	112	344	41	1483	154	8517	38
63	9.713939	113	303	41	1637	154	8363	37
64	9.714052	113	261	42	1791	154	8209	36
65	165	113	220	41	1945	154	8055	35
		112		41		154		
66	277	113	179	42	2099	154	7901	34
67	390	113	137	41	2253	154	7747	33
68	503	113	96	41	2407	154	7593	32
69	615	112	055	41	2561	154	7440	31
o. 3470	728	113	9.932013	42	2714	153	7286	o. 6530
		112		41		154		
71	840	113	9.931972	41	2868	154	7132	29
72	9.714953	112	931	42	3022	154	6978	28
73	9.715065	112	889	42	3176	154	6824	27
74	177	112	848	41	3330	154	6670	26
75	290	113	806	42	9.783483	153	10.216517	25
		112		41		154		
76	402	112	765	42	3637	154	6363	24
77	514	113	723	41	3791	154	6209	23
78	627	112	682	41	3945	153	6056	22
79	739	112	640	42	4098	154	5902	21
o. 3480	851	112	599	41	4252	154	5748	o. 6520
		112		42		153		
81	9.715963	112	557	41	4405	154	5595	19
82	9.716075	112	516	41	4559	154	5441	18
83	187	112	474	42	4713	154	5287	17
84	299	112	433	41	4866	153	5134	16
85	411	112	391	42	5020	154	4980	15
		112		41		153		
86	523	112	350	42	5173	154	4827	14
87	635	111	308	42	5327	153	4673	13
88	746	112	266	41	5480	153	4520	12
89	858	112	225	41	5633	153	4367	11
o. 3490	9.716970	112	183	42	5787	154	4213	o. 6510
		112		42		153		
91	9.717082	111	141	41	5940	154	4060	09
92	193	112	100	41	6094	153	3907	08
93	305	112	058	42	6247	153	3753	07
94	417	111	9.931016	41	6400	153	3600	06
95	528	112	9.930975	42	6553	154	3447	05
		112		42		154		
96	640	111	933	42	6707	153	3293	04
97	751	111	891	42	6860	153	3140	03
98	862	112	849	41	7013	153	2987	02
o. 3499	9.717974	111	808	41	7166	153	2834	01
o. 3500	9.718085	111	9.930766	42	9.787319	153	10.212681	o. 6500
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

o. 650.

0.350.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.3500	9.718085	111	9.930766	42	9.787319	153	10.212681	0.6500
01	196	112	724	42	7472	154	2528	0.6499
02	308	111	682	42	7626	153	2375	98
03	419	111	640	41	7779	153	2221	97
04	530	111	599	42	7932	153	2068	96
05	641	111	557	42	8085	153	1915	95
06	752	111	515	42	8238	153	1762	94
07	863	111	473	42	8391	153	1609	93
08	9.718974	111	431	42	8544	153	1456	92
09	9.719085	111	389	42	8697	152	1304	91
0.3510	196	111	347	42	8849	153	1151	0.6490
11	307	111	305	42	9002	153	0998	89
12	418	111	263	42	9155	153	0845	88
13	529	111	221	42	9308	153	0692	87
14	640	111	179	42	9461	153	0539	86
15	751	110	137	42	9614	152	0387	85
16	861	111	095	42	9766	153	0234	84
17	9.719972	111	053	42	9.789919	153	10.210081	83
18	9.720083	110	9.930011	42	9.790072	152	10.209928	82
19	193	111	9.929969	42	0224	153	9776	81
0.3520	304	111	927	42	0377	153	9623	0.6480
21	414	110	885	42	0530	152	9470	79
22	525	110	843	43	0682	153	9318	78
23	635	110	800	42	0835	152	9165	77
24	746	110	758	42	0987	153	9013	76
25	856	110	9.929716	42	9.791140	152	10.208860	75
26	9.720966	111	674	42	1292	153	8708	74
27	9.721077	110	632	42	1445	152	8555	73
28	187	110	590	43	1597	153	8403	72
29	297	110	547	42	1750	152	8250	71
0.3530	407	110	505	42	1902	153	8098	0.6470
31	517	111	463	42	2055	152	7945	69
32	628	110	421	43	2207	152	7793	68
33	738	110	378	42	2359	153	7641	67
34	848	110	336	42	2512	152	7488	66
35	9.721958	109	294	43	2664	152	7336	65
36	9.722067	110	251	42	2816	152	7184	64
37	177	110	209	42	2968	153	7032	63
38	287	110	167	43	3121	152	6879	62
39	397	110	124	42	3273	152	6727	61
0.3540	507	110	082	43	3425	152	6575	0.6460
41	617	109	9.929039	42	3577	152	6423	59
42	726	110	9.928997	42	3729	152	6271	58
43	836	110	955	43	3881	153	6119	57
44	9.722946	109	912	42	4034	152	5967	56
45	9.723055	110	870	43	4186	152	5814	55
46	165	109	827	42	4338	152	5662	54
47	274	110	785	43	4490	152	5510	53
48	384	109	742	42	4642	152	5358	52
49	493	109	700	42	4794	152	5206	51
0.3550	9.723602	109	9.928657	43	9.794946	152	10.205055	0.6450
Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.

Arg.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arg.
α. 3550	9.723603	109	9.928657	42	9.794946	151	10.205055	0.6450
51	712	110	615	43	5097	152	4903	49
52	822	109	572	43	5249	152	4751	48
53	9.723931	109	529	42	5401	152	4599	47
54	9.724040	109	487	43	5553	152	4447	46
55	149	109	444	42	5705	152	4295	45
56	258	109	402	43	5857	152	4143	44
57	367	110	359	43	6009	151	3992	43
58	477	109	316	4	6160	152	3840	42
59	586	109	273	42	6312	152	3688	41
α. 3560	695	109	231	43	6464	151	3536	α. 6440
61	804	109	188	42	6615	152	3385	39
62	9.724913	108	146	43	6767	152	3233	38
63	9.725021	109	103	43	6919	151	3081	37
64	130	109	060	43	7070	152	2930	36
65	239	109	9.928017	43	7222	151	2778	35
66	348	109	9.927974	42	7373	152	2627	34
67	457	108	932	43	7525	152	2475	33
68	565	109	889	43	7677	151	2324	32
69	674	109	846	43	7828	152	2172	31
α. 3570	783	108	803	43	7980	151	2021	α. 6430
71	891	109	760	42	8131	151	1869	29
72	9.726000	108	718	43	8282	152	1718	28
73	9.726108	109	675	43	8434	151	1566	27
74	217	108	632	43	8585	152	1415	26
75	325	109	9.927589	43	9.798737	151	10.201264	25
76	434	108	546	43	8888	151	1112	24
77	542	109	503	43	9039	152	0961	23
78	651	108	460	43	9191	151	0810	22
79	759	108	417	43	9342	151	0658	21
α. 3580	867	108	374	43	9493	151	0507	α. 6420
81	9.726975	108	331	43	9644	151	0356	19
82	9.727083	109	288	43	9795	152	0205	18
83	192	108	245	43	9.799947	151	10.200053	17
84	300	108	202	43	9.800098	151	10.199902	16
85	408	108	159	43	0249	151	9751	15
86	516	108	116	43	0400	151	9600	14
87	624	108	073	43	0551	151	9449	13
88	732	108	9.927030	43	0702	151	9298	12
89	840	108	9.926987	44	0853	151	9147	11
α. 3590	9.727948	108	943	43	1004	151	8996	α. 6410
91	9.728056	107	900	43	1155	151	8845	09
92	163	108	857	43	1306	151	8694	08
93	271	108	814	43	1457	151	8543	07
94	379	108	771	44	1608	151	8392	06
95	487	107	727	43	1759	151	8241	05
96	594	108	684	43	1910	151	8090	04
97	702	107	641	43	2061	151	7939	03
98	809	108	598	43	2212	151	7788	02
α. 3599	9.728917	107	554	43	2363	150	7638	01
α. 3600	9.729024	107	9.926511	43	9.802513	150	10.197487	α. 6400
Arg.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arg.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.3600	9.729024	108	9.926511	43	9.802513	151	10.197487	0.6400
01	132	107	468	43	2664	151	7336	0.6399
02	239	108	425	44	2815	151	7185	98
03	347	107	381	43	2966	150	7035	97
04	454	107	338	43	3116	151	6884	96
05	561	108	295	44	3267	151	6733	95
06	669	107	251	43	3418	150	6582	94
07	776	107	208	44	3568	151	6432	93
08	883	107	164	43	3719	151	6281	92
09	9.729990	108	121	43	3870	150	6131	91
0.3610	9.730098	107	078	44	4020	151	5980	0.6390
11	205	107	9.926034	43	4171	150	5829	89
12	312	107	9.925991	44	4321	151	5679	88
13	419	107	947	43	4472	150	5528	87
14	526	107	904	44	4622	151	5378	86
15	633	107	860	43	4773	150	5227	85
16	740	107	817	44	4923	151	5077	84
17	847	106	773	44	5074	150	4927	83
18	9.730953	107	729	43	5224	150	4776	82
19	9.731060	107	686	44	5374	151	4626	81
0.3620	167	107	642	43	5525	150	4475	0.6380
21	274	106	599	44	5675	150	4325	79
22	380	107	555	44	5825	151	4175	78
23	487	107	511	43	5976	150	4024	77
24	594	106	468	44	6126	150	3874	76
25	700	107	9.925424	44	6276	150	3724	75
26	807	106	380	43	6426	151	3574	74
27	9.731913	107	337	44	6577	150	3424	73
28	9.732020	106	293	44	6727	150	3273	72
29	126	107	249	43	6877	150	3123	71
0.3630	233	106	206	44	7027	150	2973	0.6370
31	339	106	162	44	7177	150	2823	69
32	445	107	118	44	7327	150	2673	68
33	552	106	074	43	7477	150	2523	67
34	658	106	9.925031	44	7627	150	2373	66
35	764	106	9.924987	44	7777	150	2223	65
36	870	106	943	44	7927	150	2073	64
37	9.732976	107	899	44	8077	150	1923	63
38	9.733083	106	855	44	8227	150	1773	62
39	189	106	811	44	8377	150	1623	61
0.3640	295	106	767	43	8527	150	1473	0.6360
41	401	106	724	44	8677	150	1323	59
42	507	106	680	44	8827	150	1173	58
43	613	105	636	44	8977	150	1023	57
44	718	106	592	44	9127	150	0873	56
45	824	106	548	44	9277	149	0724	55
46	9.733930	106	504	44	9426	150	0574	54
47	9.734036	106	460	44	9576	150	0424	53
48	142	105	416	44	9726	150	0274	52
49	247	106	372	44	9.809876	149	10.190124	51
0.3650	9.734353	106	9.924328	44	9.810025	149	10.189975	0.6350
Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.

Q. 365.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.3650	9.734353	106	9.924328	44	9.810025	150	10.189975	0.6350
51	459	105	284	44	0175	150	9825	49
52	564	106	240	44	0325	149	9675	48
53	670	105	195	45	0474	150	9526	47
54	775	105	151	44	0624	150	9376	46
55	881	106	107	44	0774	150	9227	45
		105		44		149		
56	9.734986	106	063	44	0923	150	9077	44
57	9.735092	105	9.924019	44	1073	149	8927	43
58	197	105	9.923975	44	1222	150	8778	42
59	302	106	931	45	1372	149	8628	41
0.3660	408	105	886	44	1521	150	8479	0.6340
		105		44		149		
61	513	105	842	44	1671	149	8329	39
62	618	105	798	44	1820	150	8180	38
63	723	105	754	44	1970	149	8030	37
64	829	106	710	44	2119	149	7881	36
65	9.735934	105	665	45	2268	150	7732	35
		105		44		149		
66	9.736039	105	621	44	2418	149	7582	34
67	144	105	577	45	2567	150	7433	33
68	249	105	532	45	2717	149	7284	32
69	354	105	488	44	2866	149	7134	31
0.3670	459	105	444	45	3015	149	6985	0.6330
		105		45		149		
71	564	105	399	44	3164	150	6836	29
72	669	104	355	44	3314	149	6686	28
73	773	105	311	45	3463	149	6537	27
74	878	105	266	44	3612	149	6388	26
75	9.736983	105	222	45	9.813761	149	10.186239	25
		105		45		149		
76	9.737088	104	177	44	3910	150	6090	24
77	192	105	133	45	4060	149	5941	23
78	297	105	088	44	4209	149	5791	22
79	402	105	9.923044	45	4358	149	5642	21
0.3680	506	104	9.922999	44	4507	149	5493	0.6320
		105		44		149		
81	611	104	955	45	4656	149	5344	19
82	715	105	910	44	4805	149	5195	18
83	820	104	866	45	4954	149	5046	17
84	9.737924	104	821	44	5103	149	4897	16
85	9.738029	105	777	45	5252	149	4748	15
		104		45		149		
86	133	104	732	45	5401	149	4599	14
87	237	105	687	44	5550	149	4450	13
88	342	104	643	45	5699	149	4301	12
89	446	104	598	44	5848	149	4152	11
0.3690	550	104	554	45	5997	148	4004	0.6310
		104		45		148		
91	654	104	509	45	6145	149	3855	09
92	758	105	464	44	6294	149	3706	08
93	863	104	420	45	6443	149	3557	07
94	9.738967	104	375	45	6592	149	3408	06
95	9.739071	104	330	45	6741	149	3259	05
		104		45		148		
96	175	104	285	44	6889	149	3111	04
97	279	104	241	45	7038	149	2962	03
98	383	104	196	45	7187	149	2813	02
0.3699	487	103	151	45	7336	148	2665	01
0.3700	9.739590	103	9.922106	45	9.817484	148	10.182516	0.6300
Arc.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

Q. 630.

Are.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Are.
0.3700	9.739590		9.922106		9.817484		10.182516	0.6300
01	694	104	061	45	7633	149	2367	0.6299
02	798	104	9.922015	44	7782	149	2219	98
03	9.739902	104	9.921972	45	7930	148	2070	97
04	9.740006	104	927	45	8079	149	1921	96
05	109	103	882	45	8227	148	1773	95
06	213	104		45	8376	149	1624	94
07	317	104	837	45	8524	148	1476	93
08	420	103	792	45	8673	149	1327	92
09	524	104	747	45	8821	148	1179	91
0.3710	627	103	702	45	8970	149	1030	0.6290
		104	657	45		148		
11	731	103	612	45	9118	149	0882	89
12	834	103	567	45	9267	149	0733	88
13	9.740938	104	522	45	9415	148	0585	87
14	9.741041	103	477	45	9564	149	0437	86
15	144	103	432	45	9712	148	0288	85
		104		45		148		
16	248	103	387	45	9.819860	149	10.180140	84
17	351	103	342	45	9.820009	148	10.179991	83
18	454	103	297	45	0157	148	9843	82
19	557	103	252	45	0305	148	9695	81
0.3720	660	103	207	45	0454	149	9547	0.6280
		104		45		148		
21	764	103	162	45	0602	148	9398	79
22	867	103	117	45	0750	148	9250	78
23	9.741970	103	072	45	0898	148	9102	77
24	9.742073	103	9.921026	46	1046	148	8954	76
25	176	103	9.920981	45	9.821195	149	10.178805	75
		103		45		148		
26	279	103	936	45	1343	148	8657	74
27	382	102	891	45	1491	148	8509	73
28	484	103	845	45	1639	148	8361	72
29	587	103	800	45	1787	148	8213	71
0.3730	690	103	755	45	1935	148	8065	0.6270
		103		45		148		
31	793	103	710	46	2083	148	7917	69
32	896	102	664	45	2231	148	7769	68
33	9.742998	103	619	45	2379	148	7621	67
34	9.743101	103	574	45	2527	148	7473	66
35	204	103	528	46	2675	148	7325	65
		102		45		148		
36	306	103	483	45	2823	148	7177	64
37	409	102	438	46	2971	148	7029	63
38	511	103	392	45	3119	148	6881	62
39	614	103	347	46	3267	148	6733	61
0.3740	716	102	301	46	3415	148	6585	0.6260
		103		45		148		
41	819	102	256	45	3563	148	6437	59
42	9.743921	102	211	46	3711	147	6290	58
43	9.744023	103	165	45	3858	148	6142	57
44	126	102	120	46	4006	148	5994	56
45	228	102	074	45	4154	148	5846	55
		102		45		148		
46	330	103	9.920029	46	4302	148	5698	54
47	433	102	9.919983	45	4450	147	5551	53
48	535	102	938	46	4597	148	5403	52
49	637	102	892	46	4745	148	5255	51
0.3750	9.744739	102	9.919846	46	9.824893	148	10.175107	0.6250
Are.	Log. Cosin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Are.

0. 375.

Arc.	Log. Sin.	Dif.	Log. Cos.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.3750	9.744739	102	9.919846	45	9.824893	147	10.175107	0.6250
51	841	102	801	45	5040	147	4960	49
52	9.744943	102	755	45	5188	148	4812	48
53	9.745045	102	710	45	5336	148	4665	47
54	147	102	664	45	5483	147	4517	46
55	249	102	618	45	5631	148	4369	45
56	351	102	573	45	5778	147	4222	44
57	453	102	527	45	5926	148	4074	43
58	555	101	481	45	6073	147	3927	42
59	656	102	436	45	6221	148	3779	41
0.3760	758	102	390	45	6368	147	3632	0.6240
61	860	102	344	45	6516	148	3484	39
62	9.745962	101	298	45	6663	147	3337	38
63	9.746063	102	253	45	6811	148	3189	37
64	165	102	207	45	6958	147	3042	36
65	267	101	161	45	7106	148	2894	35
66	368	102	115	45	7253	147	2747	34
67	470	101	069	45	7400	148	2600	33
68	571	102	9.919023	45	7548	147	2452	32
69	673	101	9.918978	45	7695	148	2305	31
0.3770	774	101	932	45	7842	147	2158	0.6230
71	875	102	886	45	7990	148	2010	29
72	9.746977	101	840	45	8137	147	1863	28
73	9.747078	101	794	45	8284	148	1716	27
74	179	102	748	45	8431	147	1569	26
75	281	101	9.918702	45	8579	148	1421	25
76	382	101	656	45	8726	147	1274	24
77	483	101	610	45	8873	148	1127	23
78	584	101	564	45	9020	147	0980	22
79	685	101	518	45	9167	148	0833	21
0.3780	786	101	472	45	9314	147	0686	0.6220
81	887	101	426	45	9462	148	0539	19
82	9.747988	101	380	45	9609	147	0391	18
83	9.748089	101	334	45	9756	148	0244	17
84	190	101	288	45	9.829903	147	10.170097	16
85	291	101	242	45	9.830050	147	10.169950	15
86	392	101	195	45	0197	147	9803	14
87	493	101	149	45	0344	148	9656	13
88	594	101	103	45	0491	147	9509	12
89	695	100	057	45	0638	148	9362	11
0.3790	795	101	9.918011	45	0785	147	9215	0.6210
91	896	101	9.917964	45	0932	147	9069	09
92	9.748997	100	918	45	1078	146	8922	08
93	9.749097	101	872	45	1225	147	8775	07
94	198	100	826	45	1372	147	8628	06
95	298	101	779	45	1519	147	8481	05
96	399	100	733	45	1666	147	8334	04
97	499	101	687	45	1813	146	8187	03
98	600	100	641	45	1959	147	8041	02
0.3799	700	101	594	45	2106	147	7894	01
0.3800	9.749801	101	9.917548	45	9.832253	147	10.167747	0.6200
Arc.	Log. Sin.	Dif.	Log. Cos.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.

a. 380.

Arc.	Log. Sin.	Dif.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.3800	9.749801	100	9.917548	46	9.832253	147	10.167747	0.6200
01	9.749901	100	502	47	400	146	600	0.6199
02	9.750001	101	455	46	546	147	454	98
03	102	100	409	47	693	147	307	97
04	202	100	362	47	840	146	160	96
05	302	100	316	47	9.832986	147	10.167014	95
06	402	101	269	46	9.833133	147	10.166867	94
07	503	100	223	47	280	146	720	93
08	603	100	176	46	426	147	574	92
09	703	100	130	47	573	146	427	91
0.3810	803	100	083	46	719	147	281	0.6190
11	9.750903	100	9.917037	47	9.833866	147	10.166134	89
12	9.751003	100	9.916990	46	9.834013	146	10.165988	88
13	103	100	944	47	159	147	841	87
14	203	100	897	46	306	146	695	86
15	303	100	851	47	452	147	548	85
16	403	99	804	47	599	146	402	84
17	502	100	757	46	745	146	255	83
18	602	100	711	47	9.834891	147	10.165109	82
19	702	100	664	46	9.835038	146	10.164962	81
0.3820	802	99	618	47	184	147	816	0.6180
21	9.751901	100	571	47	331	146	670	79
22	9.752001	100	524	47	477	146	523	78
23	101	99	477	46	623	147	377	77
24	200	100	431	47	770	146	231	76
25	300	99	384	47	9.835916	146	10.164084	75
26	399	100	337	47	9.836062	146	10.163938	74
27	499	99	290	46	208	147	792	73
28	598	100	244	47	355	146	645	72
29	698	99	197	47	501	146	499	71
0.3830	797	99	150	47	647	146	353	0.6170
31	896	100	103	47	793	146	207	69
32	9.752996	99	056	47	9.836939	147	10.163061	68
33	9.753095	99	9.916009	46	9.837086	146	10.162914	67
34	194	99	9.915963	47	232	146	768	66
35	293	100	916	47	378	146	622	65
36	393	99	869	47	524	146	476	64
37	492	99	822	47	670	146	330	63
38	591	99	775	47	816	146	183	62
39	690	99	728	47	9.837962	146	10.162038	61
0.3840	789	99	681	47	9.838108	146	10.161892	0.6160
41	888	99	634	47	254	146	746	59
42	9.753987	99	587	47	400	146	600	58
43	9.754086	99	540	47	546	146	454	57
44	185	99	493	47	692	146	308	56
45	284	99	446	47	838	146	162	55
46	383	99	399	47	9.838984	146	10.161016	54
47	482	98	352	48	9.839130	146	10.160870	53
48	580	99	304	47	276	146	724	52
49	679	99	257	47	422	146	578	51
0.3850	9.754778	99	9.915210	47	9.839568	146	10.160432	0.6150
Arc.	Log. Sin.	Dif.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.615.

Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
o. 3850	9.754778	98	9.915210	47	9.839568	146	10.160432	0.6150
51	876	98	163	47	714	145	287	49
52	9.754975	99	116	47	9.839859	146	10.160141	48
53	9.755074	99	069	48	9.840005	146	10.159995	47
54	172	98	9.915021	47	151	146	849	46
55	271	99	9.914974	47	297	145	703	45
56	369	98	927	47	442	146	558	44
57	468	99	880	47	588	146	412	43
58	566	98	832	47	734	146	266	42
59	665	99	785	47	9.840880	145	10.159120	41
o. 3860	763	98	738	47	9.841025	146	10.158975	0.6140
61	862	99	691	47	171	146	829	39
62	9.755560	98	643	48	317	145	683	38
63	9.756058	98	596	47	462	146	538	37
64	156	99	549	48	608	146	392	36
65	255	98	501	47	754	145	247	35
66	353	98	454	48	9.841899	146	10.158101	34
67	451	98	406	47	9.842045	145	10.157955	33
68	549	98	359	47	190	146	810	32
69	647	98	311	48	336	145	664	31
o. 3870	745	98	264	47	481	146	519	0.6130
71	843	98	217	48	627	145	373	29
72	9.756941	98	169	47	772	146	228	28
73	9.757039	98	122	48	9.842918	145	10.157082	27
74	137	98	074	48	9.843063	146	10.156937	26
75	235	98	9.914026	47	209	145	791	25
76	333	98	9.913979	48	354	145	646	24
77	431	98	931	47	499	146	501	23
78	529	98	884	47	645	145	355	22
79	626	97	836	48	790	145	210	21
o. 3880	724	98	789	47	9.843936	146	10.156065	0.6120
81	822	97	741	48	9.844081	145	10.155919	19
82	9.757919	98	693	47	226	146	774	18
83	9.758017	98	646	48	372	145	629	17
84	115	98	598	48	517	145	483	16
85	212	97	550	48	662	145	338	15
86	310	98	502	48	807	145	193	14
87	407	97	455	47	9.844953	146	10.155048	13
88	505	98	407	48	9.845098	145	10.154902	12
89	602	97	359	48	243	145	757	11
o. 3890	700	98	311	48	388	145	612	0.6110
91	797	97	264	47	533	145	467	09
92	894	97	216	48	678	145	322	08
93	9.758902	98	168	48	824	145	176	07
94	9.759089	97	120	48	9.845969	145	10.154031	06
95	186	97	072	48	9.846114	145	10.153886	05
96	283	97	9.913024	47	259	145	741	04
97	381	98	9.912977	48	404	145	596	03
98	478	97	929	48	549	145	451	02
o. 3900	575	97	881	48	694	145	306	01
o. 3900	9.759672	97	9.912833	48	9.846839	145	10.153161	0.6100
Arc.	Log. Cosin.	D.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

o. 390.

Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
o. 3900	9.759672	97	9.912833	48	9.846839	145	10.153161	0.6100
01	760	97	785	48	9.846984	145	10.153016	0.6099
02	866	97	737	48	9.847129	145	10.152871	98
03	9.759963	97	689	48	274	145	726	97
04	9.760060	97	641	48	419	145	581	96
05	157	97	593	48	564	145	436	95
06	254	97	545	48	709	145	291	94
07	351	97	497	48	854	145	146	93
08	447	96	449	48	9.847999	145	10.152001	92
09	544	97	401	48	9.848144	145	10.151857	91
o. 3910	641	97	353	48	288	144	712	0.6090
11	738	97	304	49	433	145	567	89
12	834	96	256	48	578	145	422	88
13	9.760931	97	208	48	723	145	277	87
14	9.761028	97	160	48	9.848868	144	10.151132	86
15	124	96	112	48	9.849012	145	10.150988	85
16	221	97	064	49	157	145	843	84
17	317	96	9.912015	48	302	145	698	83
18	414	97	9.911967	48	447	144	553	82
19	510	96	919	48	591	145	409	81
o. 3920	607	97	871	48	736	145	264	0.6080
21	703	96	822	48	9.849881	144	10.150119	79
22	799	97	774	48	9.850025	145	10.149975	78
23	896	97	726	48	170	145	830	77
24	9.761992	96	678	49	315	144	685	76
25	9.762088	96	9.911629	48	459	145	541	75
26	185	97	581	49	604	144	396	74
27	281	96	532	49	748	145	252	73
28	377	96	484	48	9.850893	145	10.149107	72
29	473	96	436	48	9.851038	144	10.148963	71
o. 3930	569	96	387	49	182	145	818	0.6070
31	665	96	339	49	327	144	673	69
32	761	96	290	48	471	145	529	68
33	857	96	242	48	616	145	384	67
34	9.762953	96	193	49	760	144	240	66
35	9.763049	96	145	48	9.851905	145	10.148096	65
36	145	96	096	49	9.852049	144	10.147951	64
37	241	96	9.911048	49	193	145	807	63
38	337	96	9.910999	48	338	144	662	62
39	433	96	951	49	482	145	518	61
o. 3940	529	96	902	49	627	145	374	0.6060
41	624	96	854	49	771	144	229	59
42	720	96	805	49	9.852915	145	10.147085	58
43	816	96	756	48	9.853060	144	10.146940	57
44	9.763912	95	708	49	204	144	796	56
45	9.764007	95	659	49	348	145	652	55
46	103	95	610	48	493	144	508	54
47	198	96	562	49	637	144	363	53
48	294	95	513	49	781	144	219	52
49	389	95	464	49	9.853925	144	10.146075	51
o. 3950	9.764485	96	9.910416	48	9.854069	144	10.145931	0.6050
Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.

o. 605.

Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.3950	9.764485	95	9.910416	49	9.854069	145	10.145931	0.6050
51	580	95	367	49	214	144	786	49
52	676	95	318	49	358	144	642	48
53	771	95	269	49	502	144	498	47
54	867	95	220	49	646	144	354	46
55	9.764962	95	172	48	790	144	210	45
56	9.765057	95	123	49	9.854934	144	10.145066	44
57	152	95	074	49	9.855079	145	10.144922	43
58	248	95	9.910025	49	223	144	777	42
59	343	95	9.909976	49	367	144	633	41
0.3960	438	95	927	49	511	144	489	0.6040
61	533	95	878	49	655	144	345	39
62	628	95	829	49	799	144	201	38
63	723	95	780	49	9.855943	144	10.144057	37
64	818	95	731	49	9.856087	144	10.143913	36
65	9.765913	95	682	49	231	144	769	35
66	9.766008	95	633	49	375	144	625	34
67	103	95	584	49	519	144	481	33
68	198	95	535	49	663	144	337	32
69	293	95	486	49	807	144	193	31
0.3970	388	95	437	49	9.856951	144	10.143049	0.6030
71	483	94	388	49	9.857095	143	10.142906	29
72	577	95	339	49	238	144	762	28
73	672	95	290	49	382	144	618	27
74	767	95	241	49	526	144	474	26
75	862	94	192	49	670	144	330	25
76	9.766956	95	143	50	814	144	186	24
77	9.767051	95	093	49	9.857958	143	10.142042	23
78	146	94	9.909044	49	9.858101	144	10.141899	22
79	240	95	9.908995	49	245	144	755	21
0.3980	335	94	946	49	389	144	611	0.6020
81	429	95	896	49	533	143	467	19
82	524	94	847	49	676	144	324	18
83	618	94	798	49	820	144	180	17
84	712	94	749	49	9.858964	144	10.141036	16
85	807	95	699	50	9.859108	144	10.140893	15
86	901	94	650	49	251	143	749	14
87	9.767995	95	601	50	395	144	605	13
88	9.768090	94	551	49	539	143	462	12
89	184	94	502	49	682	144	318	11
0.3990	278	94	453	49	826	144	174	0.6010
91	372	95	403	50	9.859969	143	10.140031	09
92	467	94	354	49	9.860113	144	10.139887	08
93	561	94	304	49	257	143	744	07
94	655	94	255	50	400	144	600	06
95	749	94	205	49	544	143	456	05
96	843	94	156	50	687	144	313	04
97	9.768937	94	106	50	831	143	169	03
98	9.769031	94	057	49	9.860974	144	10.139026	02
0.3999	125	94	9.908007	50	9.861118	144	10.138882	01
0.4000	9.769219	94	9.907958	49	9.861261	143	10.138739	0.6000
Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.

0.400.

Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.4000	9.769219	94	9.907958	50	9.861261	144	10.138739	0.6000
01	313	93	908	49	405	143	596	0.5999
02	406	94	859	50	548	143	452	98
03	500	94	809	50	691	144	309	97
04	594	94	759	50	835	143	165	96
05	688	94	710	49	9.861978	143	10.138022	95
06	782	94	660	50	9.862122	143	10.137879	94
07	875	93	610	50	265	143	735	93
08	9.769969	94	561	49	408	143	592	92
09	9.770063	94	511	50	552	144	448	91
0.4010	156	93	461	50	695	143	305	0.5990
11	250	94	412	49	838	143	162	89
12	343	93	362	50	9.862982	144	10.137019	88
13	437	94	312	50	9.863125	143	10.136875	87
14	530	93	262	50	268	143	732	86
15	624	94	212	50	411	143	589	85
16	717	93	163	49	555	144	446	84
17	810	93	113	50	698	143	302	83
18	904	93	063	50	841	143	159	82
19	9.770997	93	9.907013	50	9.863984	143	10.136016	81
0.4020	9.771090	93	9.906963	50	9.864127	143	10.135873	0.5980
21	184	93	913	50	271	144	730	79
22	277	93	863	50	414	143	586	78
23	370	93	813	50	557	143	443	77
24	463	93	763	50	700	143	300	76
25	556	93	9.906713	50	843	143	157	75
26	650	93	665	50	9.864986	143	10.135014	74
27	743	93	613	50	9.865129	143	10.134871	73
28	836	93	563	50	272	143	728	72
29	9.771929	93	513	50	415	143	585	71
0.4030	9.772022	93	463	50	558	143	442	0.5970
31	115	93	413	50	701	143	299	69
32	208	93	363	50	844	143	156	68
33	300	92	313	50	9.865987	143	10.134013	67
34	393	93	263	50	9.866130	143	10.133870	66
35	486	93	213	50	273	143	727	65
36	579	93	163	50	416	143	584	64
37	672	92	113	51	559	143	441	63
38	764	92	062	50	702	143	298	62
39	857	93	9.906012	50	845	143	155	61
0.4040	9.772950	93	9.905962	50	9.866988	143	10.133012	0.5960
41	9.773043	92	912	50	9.867131	143	10.132869	59
42	135	93	862	51	274	143	726	58
43	228	93	811	50	417	143	584	57
44	320	92	761	50	559	142	441	56
45	413	93	711	51	702	143	298	55
46	505	92	660	50	845	143	155	54
47	598	93	610	50	9.867988	143	10.132012	53
48	690	92	560	50	9.868131	143	10.131870	52
49	783	93	509	51	273	142	727	51
0.4050	9.773875	92	9.905459	50	9.868416	143	10.131584	0.5950
Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0.595.

a. 405.

Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.4050	9.773875	92	9.905459	50	9.868416	143	10.131584	0.5950
51	9.773967	93	409	51	559	143	441	49
52	9.774060	93	358	51	702	143	299	48
53	152	92	308	51	844	142	156	47
54	244	92	257	51	9.868987	143	10.131013	46
55	336	92	207	51	9.869130	143	10.130870	45
		93		51		142		
56	429	92	156	50	272	143	728	44
57	521	92	106	51	415	143	585	43
58	613	92	055	51	558	143	442	42
59	705	92	9.905005	51	700	142	300	41
0.4060	797	92	9.904954	51	843	143	157	0.5940
		93		50		142		
61	889	92	904	51	9.869985	143	10.130015	39
62	9.774981	92	853	51	9.870128	143	10.129872	38
63	9.775073	92	803	51	271	143	729	37
64	165	92	752	51	413	142	587	36
65	257	92	701	51	556	143	444	35
		93		50		142		
66	349	92	651	51	698	143	302	34
67	441	92	600	51	841	143	159	33
68	533	92	549	51	9.870983	142	10.129017	32
69	624	91	499	51	9.871126	143	10.128874	31
0.4070	716	92	448	51	268	142	732	0.5930
		93		51		143		
71	808	92	397	51	411	142	589	29
72	900	92	346	51	553	142	447	28
73	9.775991	91	296	51	696	143	304	27
74	9.776083	92	245	51	838	142	162	26
75	175	92	194	51	9.871981	143	10.128020	25
		93		51		142		
76	266	92	143	51	9.872123	142	10.127877	24
77	358	92	092	51	265	143	735	23
78	449	91	9.904042	51	408	142	592	22
79	541	92	9.903991	51	550	142	450	21
0.4080	632	91	940	51	692	142	308	0.5920
		92		51		143		
81	724	92	889	51	835	142	165	19
82	816	91	838	51	9.872977	142	10.127023	18
83	908	92	787	51	9.873119	143	10.126881	17
84	9.776998	91	736	51	262	142	738	16
85	9.777089	91	685	51	404	142	596	15
		92		51		143		
86	180	92	634	51	546	142	454	14
87	272	91	583	51	688	143	312	13
88	363	91	532	51	831	142	169	12
89	454	91	481	51	9.873973	142	10.126027	11
0.4090	545	91	430	51	9.874115	142	10.125885	0.5910
		92		51		143		
91	636	92	379	51	257	143	743	09
92	728	92	328	51	400	142	601	08
93	819	91	277	51	542	142	458	07
94	9.777910	91	226	51	684	142	316	06
95	9.778001	91	175	51	826	142	174	05
		92		51		143		
96	092	91	124	52	9.874968	142	10.125032	04
97	183	90	072	51	9.875110	142	10.124890	03
98	274	90	9.903021	51	252	143	748	02
0.4099	364	90	9.902970	51	395	142	606	01
0.4100	9.778455	91	9.902919	51	9.875537	142	10.124464	0.5900
Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.

a. 590.

Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.4100	9.778455	91	9.902919	51	9.875537	142	10.124464	0.5900
01	546	91	868	51	679	142	321	0.5899
02	637	91	816	51	821	142	179	98
03	728	91	765	51	9.875963	142	10.124037	97
04	819	91	714	51	9.876105	142	10.123805	96
05	909	90	663	51	247	142	753	95
		91		52		142		
06	9.779000	91	611	51	389	142	611	94
07	9.779091	90	560	51	531	142	469	93
08	181	90	509	52	673	142	327	92
09	272	90	457	51	815	142	185	91
0.4110	362	90	406	51	9.876957	142	10.123043	0.5890
		91		52		142		
11	453	91	354	51	9.877099	142	10.122901	89
12	544	91	303	51	241	142	759	88
13	634	90	252	51	383	142	618	87
14	724	90	200	52	524	142	476	86
15	815	91	149	51	666	142	334	85
		90		52		142		
16	905	91	097	51	808	142	192	84
17	9.779996	90	9.902046	52	9.877950	142	10.122050	83
18	9.780086	90	9.901994	51	9.878092	142	10.121908	82
19	176	91	943	52	234	142	766	81
0.4120	267	91	891	52	376	142	624	0.5880
		90		52		142		
21	357	90	839	51	517	142	483	79
22	447	90	788	52	659	142	341	78
23	537	90	736	52	801	142	199	77
24	627	90	685	51	9.878943	142	10.121057	76
25	718	91	9.901633	52	9.879085	142	10.120916	75
		90		52		142		
26	808	90	581	51	226	142	774	74
27	898	90	530	52	368	142	632	73
28	9.780988	90	478	52	510	142	490	72
29	9.781078	90	426	52	652	142	349	71
0.4130	168	90	375	51	793	142	207	0.5870
		90		52		142		
31	258	90	323	52	9.879935	142	10.120065	69
32	348	90	271	52	9.880077	141	10.119924	68
33	438	90	219	52	218	142	782	67
34	527	89	168	51	360	142	640	66
35	617	90	116	52	502	142	499	65
		90		52		142		
36	707	90	064	52	643	142	357	64
37	797	90	9.901012	52	785	141	215	63
38	887	89	9.900960	52	9.880926	142	10.119074	62
39	9.781976	89	908	51	9.881068	142	10.118932	61
0.4140	9.782066	90	857	51	210	142	791	0.5860
		90		52		142		
41	156	89	805	52	351	142	649	59
42	245	90	753	52	493	141	507	58
43	335	90	701	52	634	142	366	57
44	425	90	649	52	776	141	224	56
45	514	89	597	52	9.881917	142	10.118083	55
		90		52		142		
46	604	89	545	52	9.882059	141	10.117941	54
47	693	90	493	52	200	142	800	53
48	783	89	441	52	342	141	658	52
49	872	89	389	52	483	142	517	51
0.4150	9.782961	89	9.900337	52	9.882625	142	10.117375	0.5850
Arc.	Log. Cosin.	D.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0. 415.

Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.4150	9.782961	90	9.900337	52	9.882625	141	10.117375	0.5850
51	9.783051	89	285	52	766	142	234	49
52	140	89	233	52	9.882908	141	10.117093	48
53	229	90	181	53	9.883049	141	10.116951	47
54	319	89	128	52	190	142	810	46
55	408	89	076	52	332	141	668	45
56	497	89	9.900024	52	473	142	527	44
57	586	90	9.899972	52	615	141	386	43
58	676	89	920	52	756	141	244	42
59	765	89	868	53	9.883897	142	10.116103	41
0.4160	854	89	815	52	9.884039	141	10.115962	0.5840
61	9.783943	89	763	52	180	141	820	39
62	9.784032	89	711	52	321	142	679	38
63	121	89	659	53	463	141	538	37
64	210	89	606	52	604	141	396	36
65	299	89	554	52	745	141	255	35
66	388	89	502	53	9.884886	142	10.115114	34
67	477	89	449	52	9.885028	141	10.114972	33
68	566	89	397	52	169	141	831	32
69	655	88	345	53	310	141	690	31
0.4170	743	89	292	52	451	141	549	0.5830
71	832	89	240	53	592	142	408	29
72	9.784921	89	187	52	734	141	266	28
73	9.785010	88	135	53	9.885875	141	10.114125	27
74	098	89	082	52	9.886016	141	10.113984	26
75	187	89	9.899030	53	157	141	843	25
76	276	88	9.898977	52	298	141	702	24
77	364	89	925	53	439	142	561	23
78	453	88	872	52	581	141	419	22
79	541	89	820	53	722	141	278	21
0.4180	630	89	767	52	9.886863	141	10.113137	0.5820
81	719	89	715	53	9.887004	141	10.112995	19
82	807	88	662	53	145	141	855	18
83	895	89	609	52	286	141	714	17
84	9.785984	88	557	53	427	141	573	16
85	9.786072	89	504	53	568	141	432	15
86	161	88	451	52	709	141	291	14
87	249	88	399	53	850	141	150	13
88	337	80	346	53	9.887991	141	10.112009	12
89	426	88	293	52	9.888132	141	10.111868	11
0.4190	514	88	241	53	273	141	727	0.5810
91	602	88	188	53	414	141	586	09
92	690	88	135	53	555	141	445	08
93	778	88	082	52	696	141	304	07
94	866	89	9.898030	53	837	141	163	06
95	9.786955	88	9.897977	53	9.888978	141	10.111022	05
96	9.787043	88	924	53	9.889119	141	10.110881	04
97	131	88	871	53	260	141	740	03
98	219	88	818	53	401	141	599	02
0.4199	307	88	765	53	542	141	459	01
0.4200	9.787395	88	9.897712	53	9.889682	140	10.110318	0.5800
Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.

0. 580.

Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.4200	9.787395	88	9.897712	53	9.889682	141	10.110318	0.5800
01	483	88	659	53	823	141	177	0.5799
02	571	87	606	52	9.889964	141	10.110036	98
03	658	88	551	53	9.890105	141	10.109895	97
04	746	88	501	53	246	141	754	96
05	834	88	448	53	387	141	614	95
		88		53		140		
06	9.787922	88	395	55	527	141	473	94
07	9.788610	87	342	54	668	141	332	93
08	097	88	288	53	809	141	191	92
09	185	88	235	53	9.890950	141	10.109030	91
0.4210	273	87	182	53	9.891090	141	10.108910	0.5790
		87		53		141		
11	360	88	129	53	231	141	769	89
12	448	88	076	53	372	141	628	88
13	536	88	9.897023	53	513	141	487	87
14	623	88	9.896970	53	653	141	347	86
15	711	87	917	54	794	141	206	85
		88		53		140		
16	798	88	863	53	9.891935	140	10.108065	84
17	886	87	810	53	9.892075	141	10.107925	83
18	9.788973	88	757	53	216	141	784	82
19	9.789061	87	704	53	357	141	643	81
0.4220	148	87	651	54	497	141	503	0.5780
		88		53		141		
21	235	88	597	53	638	141	362	79
22	323	87	544	53	779	140	221	78
23	410	87	491	54	9.892919	141	10.107081	77
24	497	87	437	53	9.893060	141	10.106940	76
25	584	88	9.896384	53	200	140	800	75
		87		54		141		
26	672	87	331	54	341	141	659	74
27	759	87	277	53	482	140	518	73
28	846	87	224	53	622	141	378	72
29	9.789933	87	171	54	763	141	237	71
0.4230	9.790020	87	117	53	9.893903	141	10.106097	0.5770
		87		54		141		
31	107	87	064	54	9.894044	140	10.105956	69
32	194	87	9.896010	53	184	141	816	68
33	281	87	9.895957	54	325	141	675	67
34	368	87	903	53	465	140	535	66
35	455	87	850	54	606	141	394	65
		87		54		140		
36	542	87	796	53	746	141	254	64
37	629	87	743	54	9.894887	140	10.105113	63
38	716	87	689	53	9.895027	141	10.104973	62
39	803	87	636	54	168	141	833	61
0.4240	890	87	582	54	308	140	692	0.5760
		87		54		140		
41	9.790977	86	528	53	448	141	552	59
42	9.791063	87	475	54	589	140	411	58
43	150	87	411	54	729	141	271	57
44	237	87	367	53	9.895870	140	10.104131	56
45	324	86	314	54	9.896010	140	10.103990	55
		87		54		140		
46	410	87	260	54	150	141	850	54
47	497	86	206	53	291	140	709	53
48	583	87	153	54	431	140	569	52
49	670	87	099	54	571	141	429	51
0.4250	9.791757	87	9.895045	54	9.896712	141	10.103288	0.5750
Arc.	Log. Cosin.	D.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0. 425.

Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0. 4250	9.791757	86	9.895045	54	9.896712	140	10.103288	0.5750
51	843	87	9.894991	54	852	140	148	49
52	9.791930	86	9.894937	53	9.896992	140	10.103008	48
53	9.792016	87	884	54	9.897133	141	10.102868	47
54	103	86	830	54	273	140	727	46
55	189	86	776	54	413	140	587	45
56	275	87	722	54	553	140	447	44
57	362	86	668	54	694	141	307	43
58	448	86	614	54	834	140	166	42
59	534	87	560	54	9.897974	140	10.102026	41
0. 4260	621	86	506	54	9.898114	140	10.101886	0.5740
61	707	86	452	54	254	141	746	39
62	793	86	398	54	395	140	605	38
63	879	86	344	54	535	140	465	37
64	9.792965	86	290	54	675	140	325	36
65	9.793051	87	236	54	815	140	185	35
66	138	86	182	54	9.898955	140	10.101045	34
67	224	86	128	54	9.899095	141	10.100905	33
68	310	86	74	54	236	140	764	32
69	396	86	9.894020	54	376	140	624	31
0. 4270	482	86	9.893966	54	516	140	484	0.5730
71	568	86	912	54	656	140	344	29
72	654	86	858	54	796	140	204	28
73	740	85	803	55	9.899936	140	10.100064	27
74	825	86	749	54	9.900076	140	10.099924	26
75	911	86	695	54	216	140	784	25
76	9.793997	86	641	54	356	140	644	24
77	9.794083	86	587	54	496	140	504	23
78	169	85	532	55	636	140	364	22
79	254	86	478	54	776	140	224	21
0. 4280	340	86	424	54	9.900916	140	10.099084	0.5720
81	426	85	369	55	9.901056	140	10.098944	19
82	511	86	315	54	196	140	804	18
83	597	86	261	54	336	140	664	17
84	683	85	206	55	476	140	524	16
85	768	86	152	54	616	140	384	15
86	854	85	998	55	756	140	244	14
87	9.794939	86	9.893043	54	9.901896	140	10.098104	13
88	9.795025	85	9.892989	55	9.902036	140	10.097964	12
89	110	86	934	54	176	140	824	11
0. 4290	196	86	880	54	316	140	684	0.5710
91	281	86	825	55	456	140	544	09
92	367	85	771	55	596	140	404	08
93	452	85	716	54	736	139	265	07
94	537	86	662	55	9.902875	140	10.097125	06
95	623	85	607	54	9.903015	140	10.096985	05
96	708	85	553	55	155	140	845	04
97	793	85	498	54	295	140	705	03
98	878	85	444	55	435	140	565	02
0. 4299	9.795963	86	389	55	575	140	425	01
0. 4300	9.796049	86	9.892334	55	9.903714	139	10.096286	0.5700
Arc.	Log. Cosin.	D.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0. 570.

Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.4300	9.796049	85	9.892334	54	9.903714	140	10.096286	0.5700
01	134	85	280	55	854	139	146	0.5699
02	219	85	225	55	9.903994	140	10.096006	98
03	304	85	170	55	9.904134	140	10.095866	97
04	389	85	115	54	274	139	726	96
05	474	85	061	55	413	140	587	95
06	559	85	9.892006	55	553	140	447	94
07	644	85	9.891951	55	693	140	307	93
08	729	85	896	54	833	140	168	92
09	814	85	842	55	9.904972	140	10.095028	91
0.4310	899	85	787	55	9.905112	140	10.094888	0.5690
11	9.796984	84	732	55	252	139	748	89
12	9.797068	85	677	55	391	140	609	88
13	153	85	622	55	531	140	469	87
14	238	85	567	55	671	139	329	86
15	323	85	512	54	810	140	190	85
16	408	84	458	55	9.905950	140	10.094050	84
17	492	85	403	55	9.906090	139	10.093910	83
18	577	85	348	55	229	140	771	82
19	662	85	293	55	369	140	631	81
0.4320	746	84	238	55	509	139	491	0.5680
21	831	84	183	55	648	140	352	79
22	915	85	128	55	788	139	212	78
23	9.798000	84	073	56	9.906927	140	10.093073	77
24	9.798084	85	9.891017	55	9.907067	140	10.092931	76
25	169	85	9.890962	55	207	139	794	75
26	253	85	907	55	346	140	654	74
27	338	84	852	55	486	139	514	73
28	422	85	797	55	625	140	375	72
29	507	84	742	55	765	139	235	71
0.4330	591	84	687	56	9.907904	140	10.092096	0.5670
31	675	85	631	55	9.908044	139	10.091956	69
32	760	84	576	55	183	140	817	68
33	844	84	521	55	323	139	677	67
34	9.798928	84	466	55	462	140	538	66
35	9.799012	84	411	56	602	139	398	65
36	096	85	355	55	741	140	259	64
37	181	84	300	55	9.908881	139	10.091119	63
38	265	84	245	56	9.909020	140	10.090980	62
39	349	84	189	55	160	139	841	61
0.4340	433	84	134	55	299	139	701	0.5660
41	517	84	079	55	438	140	562	59
42	601	84	9.890023	55	578	139	422	58
43	685	84	9.889968	56	717	140	283	57
44	769	84	912	55	857	139	144	56
45	853	84	857	56	9.909996	139	10.090004	55
46	9.799937	84	801	55	9.910135	140	10.089865	54
47	9.800021	84	746	55	275	139	725	53
48	105	83	691	56	414	139	586	52
49	188	83	635	56	553	140	447	51
0.4350	9.800272	84	9.889579	56	9.910693	140	10.089307	0.5650
Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.

Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
o. 4350	9.800272	84	9.889579	55	9.910693	139	10.089307	o. 5650
51	356	84	524	56	832	139	168	49
52	440	83	468	55	9.910971	140	10.089029	48
53	523	84	413	56	9.911111	139	10.088889	47
54	607	84	357	55	250	139	750	46
55	691	83	302	56	389	140	611	45
56	774	84	246	56	529	139	472	44
57	858	84	190	55	668	139	332	43
58	9.800742	83	135	56	807	139	193	42
59	9.801025	84	079	56	9.911946	140	10.088054	41
o. 4360	109	83	9.889023	56	9.912086	139	10.087914	o. 5640
61	192	84	9.888967	56	225	139	773	39
62	276	83	911	55	364	139	636	38
63	359	84	856	56	503	140	497	37
64	443	83	800	56	643	139	358	36
65	526	83	744	55	782	139	218	35
66	609	84	689	56	9.912921	139	10.087079	34
67	693	83	633	56	9.913060	139	10.086940	33
68	776	84	577	56	199	139	801	32
69	860	83	521	56	338	139	662	31
o. 4370	9.801943	83	465	56	478	139	523	o. 5630
71	9.802026	83	409	56	617	139	383	29
72	109	83	353	56	756	139	244	28
73	193	82	297	56	9.913895	139	10.086105	27
74	275	84	241	56	9.914034	139	10.085966	26
75	359	83	185	56	173	139	827	25
76	442	83	129	56	312	139	688	24
77	525	83	073	56	451	140	549	23
78	608	83	9.888017	56	591	139	410	22
79	691	83	9.887961	56	730	139	270	21
o. 4380	774	83	905	56	9.914869	139	10.085131	o. 5620
81	857	83	849	56	9.915008	139	10.084992	19
82	9.802940	83	793	56	147	139	853	18
83	9.803023	83	737	56	286	139	714	17
84	106	83	681	56	425	139	575	16
85	189	82	625	57	564	139	436	15
86	271	83	568	56	703	139	297	14
87	354	83	512	56	842	139	158	13
88	437	83	456	56	9.915981	139	10.084019	12
89	520	83	400	56	9.916120	139	10.083880	11
o. 4390	603	82	344	57	259	139	741	o. 5610
91	685	83	287	56	398	139	602	09
92	768	83	231	56	537	139	463	08
93	851	82	175	57	676	139	324	07
94	9.803933	83	118	56	815	139	185	06
95	9.804016	82	062	56	9.916954	139	10.083046	05
96	098	83	9.887006	57	9.917093	139	10.082907	04
97	181	82	9.886949	56	232	139	768	03
98	263	83	893	56	371	138	630	02
o. 4399	346	83	837	56	509	139	491	01
o. 4400	9.804428	82	9.886780	57	9.917648	139	10.082352	o. 5600
Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.

O. 440.

Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.4400	9.804428	83	9.886780	56	9.917648	139	10.082352	0.5600
01	511	82	724	57	787	139	213	0.5599
02	593	83	667	56	9.917926	139	10.082074	98
03	676	82	611	57	9.918065	139	10.081935	97
04	758	82	554	56	204	139	796	96
05	840	83	498	57	343	139	657	95
06	9.804923	82	441	56	482	138	519	94
07	9.805005	82	385	57	620	139	380	93
08	087	83	328	56	759	139	241	92
09	170	82	272	57	9.918898	139	10.081102	91
0.4410	252	82	215	57	9.919037	139	10.080963	0.5590
11	334	82	158	56	176	139	824	89
12	416	82	102	57	315	138	686	88
13	498	82	9.886045	57	453	139	547	87
14	580	82	9.885988	56	592	139	408	86
15	662	82	932	57	731	139	269	85
16	744	83	875	57	9.919870	138	10.080130	84
17	827	82	818	57	9.920008	139	10.079992	83
18	909	81	761	56	147	139	853	82
19	9.805990	82	705	57	286	139	714	81
0.4420	9.806072	82	648	57	425	138	575	0.5580
21	154	82	591	57	563	139	437	79
22	236	82	534	57	702	139	298	78
23	318	82	477	57	841	139	159	77
24	400	82	420	56	9.920980	138	10.079021	76
25	482	82	364	57	9.921118	139	10.078882	75
26	564	81	307	57	257	139	743	74
27	646	82	250	57	396	138	604	73
28	727	82	193	57	534	139	466	72
29	809	82	136	57	673	139	327	71
0.4430	891	81	079	57	812	139	188	0.5570
31	9.806972	82	9.885022	57	9.921950	139	10.078050	69
32	9.807054	81	9.884965	57	9.922080	139	10.077911	68
33	135	82	908	57	228	138	773	67
34	217	82	851	57	366	139	634	66
35	299	81	794	57	505	138	495	65
36	380	82	737	57	643	139	357	64
37	462	81	680	57	782	139	218	63
38	543	82	623	58	9.922921	138	10.077080	62
39	625	81	565	57	9.923059	139	10.076941	61
0.4440	706	81	508	57	198	138	802	0.5560
41	787	82	451	57	336	139	664	59
42	869	81	394	57	475	138	525	58
43	9.807950	81	337	57	613	139	387	57
44	9.808031	82	279	57	752	139	248	56
45	113	81	222	57	9.923891	138	10.076110	55
46	194	81	165	57	9.924029	139	10.075971	54
47	275	81	108	58	168	138	832	53
48	356	82	9.884050	57	306	139	694	52
49	438	81	9.883993	57	445	138	555	51
0.4450	9.808519	81	9.883936	57	9.924583	139	10.075417	0.5550
Arc.	Log. Cosin.	D.	Log. Sin.	D.	Log. Cat.	Dif.	Log. Tang.	Arc.

O. 555.

o. 445.

Are.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Are.
o. 4450	9.808518	82	9.883936	58	9.924583	139	10.075417	0.5550
51	600	81	878	57	722	138	278	49
52	681	81	821	57	860	138	140	48
53	762	81	764	58	9.924999	139	10.075001	47
54	843	81	706	57	9.925137	138	10.074863	46
55	9.808924	81	649	57	276	139	725	45
		81		58		138		
56	9.809005	81	591	57	414	138	586	44
57	086	81	534	57	552	138	448	43
58	167	81	476	57	691	139	309	42
59	248	81	419	58	829	138	171	41
o. 4460	329	81	361	57	9.925968	139	10.074032	0.5540
		81		57		138		
61	410	81	304	58	9.926106	139	10.073894	39
62	491	81	246	57	245	138	756	38
63	572	80	189	57	383	138	617	37
64	652	81	131	57	521	139	479	36
65	733	81	074	58	660	138	340	35
		81		58		138		
66	814	81	9.883016	58	798	139	202	34
67	895	80	9.882958	57	9.926937	138	10.073064	33
68	9.809975	81	901	58	9.927075	138	10.072925	32
69	9.810056	81	843	58	213	138	787	31
o. 4470	137	80	785	58	352	139	648	0.5530
		80		58		138		
71	217	81	727	57	490	138	510	29
72	298	81	670	58	628	139	372	28
73	379	80	612	58	767	138	233	27
74	459	81	554	58	9.927905	138	10.072095	26
75	540	80	496	57	9.928043	139	10.071957	25
		80		57		138		
76	620	81	439	58	182	138	818	24
77	701	80	381	58	320	138	680	23
78	781	80	323	58	458	139	542	22
79	861	81	265	58	597	138	404	21
o. 4480	9.810942	80	207	58	735	138	265	0.5520
		80		58		138		
81	9.811022	81	149	58	9.928873	138	10.071127	19
82	103	80	091	58	9.929011	139	10.070989	18
83	183	80	9.882033	58	150	138	851	17
84	263	80	9.881975	58	288	138	712	16
85	343	81	917	58	426	138	574	15
		81		58		138		
86	424	80	859	58	564	139	436	14
87	504	80	801	58	703	138	298	13
88	584	80	743	58	841	138	159	12
89	664	80	685	58	9.929979	138	10.070021	11
o. 4490	744	81	627	58	9.930117	138	10.069881	0.5510
		81		58		138		
91	825	80	569	58	255	139	745	09
92	905	80	511	58	394	138	606	08
93	9.811985	80	453	58	532	138	468	07
94	9.812065	80	395	58	670	138	330	06
95	145	80	337	59	808	138	192	05
		80		59		138		
96	225	80	278	58	9.930946	139	10.069054	04
97	305	80	220	58	9.931085	138	10.068916	03
98	385	80	162	58	223	138	777	02
2.4499	465	80	104	58	361	138	639	01
2.4500	9.812544	79	9.881046	58	9.931499	138	10.068501	0.5500
Are.	Log. Cosin.	D.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Are.

o. 550.

0.450.

Are.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Are.
0.4500	9.812544	80	9.881046	59	9.931499	138	10.068501	0.550
01	624	80	9.880987	59	637	138	363	0.549
02	704	80	9.880929	58	775	138	225	9
03	784	80	871	58	9.931913	138	10.068087	9
04	864	80	812	59	9.932051	138	10.067949	9
05	9.812944	80	754	58	190	139	811	9
06	9.813023	79	696	58	328	138	672	9
07	103	80	637	59	466	138	534	9
08	183	80	579	58	604	138	396	9
09	262	79	520	59	742	138	258	9
0.4510	342	80	462	58	9.932880	138	10.067120	0.5490
11	422	79	404	59	9.933018	138	10.066982	89
12	501	80	345	58	156	138	844	88
13	581	80	287	59	294	138	706	87
14	660	80	228	58	432	138	568	86
15	740	79	170	59	570	138	430	85
16	819	80	111	59	708	138	292	84
17	899	79	9.880052	58	846	138	154	83
18	9.813978	79	9.879994	59	9.933984	138	10.066016	82
19	9.814057	80	935	58	9.934122	138	10.065878	81
0.4520	137	80	877	59	260	138	740	0.5480
21	216	79	818	59	398	138	602	79
22	296	79	759	58	536	138	464	78
23	375	79	701	59	674	138	326	77
24	454	79	642	59	812	138	188	76
25	533	80	583	59	9.934950	138	10.065050	75
26	613	79	524	58	9.935088	138	10.064912	74
27	692	79	466	59	226	138	774	73
28	771	79	407	59	364	138	636	72
29	850	79	348	59	502	138	498	71
0.4530	9.814929	79	289	59	640	138	360	0.5470
31	9.815008	79	230	58	778	138	222	69
32	087	80	172	59	9.935916	138	10.064084	68
33	167	79	113	59	9.936054	138	10.063946	67
34	246	79	9.879054	59	192	137	808	66
35	325	79	9.878995	59	329	139	670	65
36	404	78	936	59	468	137	533	64
37	482	79	877	59	605	138	395	63
38	561	79	818	59	743	138	257	62
39	640	79	759	59	9.936881	138	10.063119	61
0.4540	719	79	700	59	9.937019	138	10.062981	0.5460
41	798	79	641	59	157	138	843	59
42	877	79	582	59	295	138	705	58
43	9.815956	79	523	59	433	138	567	57
44	9.816034	78	464	59	571	137	430	56
45	113	79	405	59	708	138	292	55
46	192	79	346	59	846	138	154	54
47	271	78	287	60	9.937984	138	10.062026	53
48	349	79	227	59	9.938122	138	10.061878	52
49	428	79	168	59	260	138	740	51
0.4550	9.816507	79	9.878109	59	9.938398	138	10.061603	0.5450
Are.	Log. Cosin.	D.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Are.

0.545.

0.455.

Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.4550	9.816507	78	9.878109	59	9.938398	137	10.061603	0.2450
51	585	79	9.878050	59	535	138	465	49
52	664	79	9.877991	60	673	138	327	48
53	742	78	931	59	811	138	189	47
54	821	79	872	59	9.938949	138	10.061051	46
55	899	78	813	59	9.939087	137	10.060914	45
56	9.816978	79	754	60	224	138	776	44
57	9.817056	78	694	59	362	138	638	43
58	135	79	635	59	500	138	500	42
59	213	78	576	60	638	137	362	41
0.4560	292	79	516	59	775	138	225	0.5440
61	370	78	457	60	9.939913	138	10.060087	39
62	448	78	397	59	9.940051	138	10.059949	38
63	526	79	338	60	189	137	811	37
64	605	78	278	59	326	138	674	36
65	683	78	219	59	464	138	536	35
66	761	78	160	60	602	138	398	34
67	839	79	100	60	740	137	261	33
68	918	78	9.877040	59	9.940877	138	10.059123	32
69	9.817996	78	9.876981	60	9.941015	138	10.058985	31
0.4570	9.818074	78	921	59	153	137	847	0.5430
71	152	78	862	60	290	138	710	29
72	230	78	802	59	428	138	572	28
73	308	78	743	60	566	137	434	27
74	386	78	683	60	703	138	297	26
75	464	78	623	59	841	138	159	25
76	542	78	564	60	9.941979	137	10.058021	24
77	620	78	504	60	9.942116	138	10.057884	23
78	698	78	444	60	254	138	746	22
79	776	78	384	59	392	137	608	21
0.4580	854	78	325	60	529	138	471	0.5420
81	9.818932	78	265	60	667	137	333	19
82	9.819010	77	205	60	804	138	196	18
83	087	78	145	60	9.942942	138	10.057058	17
84	165	78	085	59	9.943080	137	10.056920	16
85	243	78	9.876026	60	217	138	783	15
86	321	77	9.875966	60	355	138	645	14
87	398	78	906	60	493	137	508	13
88	476	78	846	60	630	138	370	12
89	554	77	786	60	768	137	232	11
0.4590	631	78	726	60	9.943905	138	10.056095	0.5410
91	709	78	666	60	9.944043	137	10.055957	09
92	787	77	606	60	180	138	820	08
93	864	78	546	60	318	138	682	07
94	9.819942	78	486	60	456	137	545	06
95	9.820019	77	426	60	593	138	407	05
96	097	77	366	60	731	137	269	04
97	174	78	306	60	9.944868	138	10.055132	03
98	252	77	246	60	9.945006	137	10.054994	02
0.4599	329	77	186	60	143	138	857	01
0.4600	9.820406	77	9.875126	60	9.945281	138	10.054719	0.5400
Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.

0.540.

o. 460.

Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
o. 4600	9.820406	78	9.875126	61	9.945281	137	10.054719	o. 5400
01	484	77	065	60	418	138	582	o. 5399
02	561	77	9.875005	60	556	138	444	98
03	638	77	9.874945	60	693	137	307	97
04	716	78	885	60	831	138	169	96
05	793	77	825	60	9.945968	137	10.054032	95
06	870	77	764	61	9.946106	138	10.053894	94
07	9.820917	77	704	60	243	137	757	93
08	9.821025	78	644	60	381	138	619	92
09	102	77	584	60	518	137	482	91
o. 4610	179	77	523	61	656	138	344	o. 5390
11	256	77	463	60	793	137	207	89
12	333	77	403	60	9.946931	138	10.053069	88
13	410	77	342	61	9.947068	137	10.052932	87
14	487	77	282	60	206	138	795	86
15	564	77	221	61	343	137	657	85
16	641	77	161	60	480	137	520	84
17	718	77	100	60	618	138	382	83
18	795	77	9.874040	61	755	137	245	82
19	872	77	9.873979	60	9.947893	138	10.052107	81
o. 4620	9.821949	77	919	61	9.948030	137	10.051970	o. 5380
21	9.822026	77	858	60	168	138	833	79
22	103	77	798	61	305	137	695	78
23	180	77	737	60	442	137	558	77
24	256	76	677	61	580	138	420	76
25	333	77	616	61	717	137	283	75
26	410	77	555	60	855	138	146	74
27	487	77	495	61	9.948992	137	10.051008	73
28	563	76	434	61	9.949129	138	10.050871	72
29	640	77	373	60	267	137	733	71
o. 4630	717	77	313	61	404	137	596	o. 5370
31	793	76	252	61	541	137	459	69
32	870	77	191	60	679	138	321	68
33	9.822947	77	131	61	816	137	184	67
34	9.823023	76	070	61	9.949953	138	10.050047	66
35	100	77	9.873009	61	9.950091	137	10.049909	65
36	176	76	9.872948	61	228	137	772	64
37	253	77	887	61	365	138	635	63
38	329	76	826	60	503	137	497	62
39	406	77	766	61	640	137	360	61
o. 4640	482	76	705	61	777	138	223	o. 5360
41	558	77	644	61	9.950915	137	10.049085	59
42	635	76	583	61	9.951052	137	10.048948	58
43	711	76	522	61	189	138	811	57
44	787	76	461	61	327	137	673	56
45	864	77	400	61	464	137	536	55
46	9.823940	76	339	61	601	138	399	54
47	9.824016	76	278	61	739	137	262	53
48	092	77	217	61	9.951876	137	10.048124	52
49	169	77	156	61	9.952013	137	10.047987	51
o. 4650	9.824245	76	9.872095	61	9.952150	137	10.047850	o. 5350
Arc.	Log. Cosin.	D.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

o. 535.

0. 465.

Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.4650	9.824245	76	9.872095	62	9.952150	138	10.047850	0.5350
51	321	76	9.872033	61	288	137	712	49
52	397	76	9.871972	61	425	137	575	48
53	473	76	911	61	562	137	438	47
54	549	76	850	61	699	137	301	46
55	625	76	789	61	837	138	163	45
56	701	76	728	62	9.952974	137	10.047026	44
57	777	76	666	61	9.953111	137	10.046889	43
58	853	76	605	61	248	137	752	42
59	0.824929	76	544	61	386	138	615	41
0.5660	9.825005	76	483	61	523	137	477	0.5340
61	081	76	421	61	660	137	340	39
62	157	76	360	61	797	137	203	38
63	233	76	299	62	9.953934	137	10.046066	37
64	309	76	237	61	9.954072	137	10.045928	36
65	385	75	176	62	209	137	791	35
66	460	76	114	61	346	137	654	34
67	536	76	9.871053	61	483	137	517	33
68	612	76	9.870992	62	620	138	380	32
69	688	75	930	61	758	137	243	31
0.4670	763	76	869	61	9.954895	137	10.045105	0.5330
71	839	76	807	61	9.955032	137	10.044968	29
72	915	75	746	62	169	137	831	28
73	9.825990	76	684	61	306	137	694	27
74	9.826066	75	623	62	443	138	557	26
75	141	76	561	62	581	137	420	25
76	217	76	499	61	718	137	282	24
77	293	75	438	62	855	137	145	23
78	368	76	376	62	9.955992	137	10.044008	22
79	444	75	314	61	9.956129	137	10.043871	21
0.4680	519	75	253	62	266	137	734	0.5320
81	594	76	191	62	403	138	597	19
82	670	75	129	61	541	137	460	18
83	745	76	068	62	678	137	322	17
84	821	75	9.870006	62	815	137	185	16
85	896	75	9.869944	62	9.956952	137	10.043048	15
86	9.826971	76	882	61	9.957089	137	10.042911	14
87	9.827047	75	821	62	226	137	774	13
88	122	75	759	62	363	137	637	12
89	197	75	697	62	500	137	500	11
0.4690	272	75	635	62	637	137	363	0.5310
91	347	76	573	62	774	138	226	09
92	423	75	511	62	9.957912	137	10.042089	08
93	498	75	449	62	9.958049	137	10.041951	07
94	573	75	387	62	186	137	814	06
95	648	75	325	62	323	137	677	05
96	723	75	263	62	460	137	540	04
97	798	75	201	62	597	137	403	03
98	873	75	139	62	734	137	266	02
0.4699	9.827948	75	077	62	9.958871	137	10.041129	01
0.4700	9.828023	75	0.869015	62	9.959008	137	10.040992	0.5300
Arc.	Log. Cosin.	D.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0. 530.

α 470

Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
α 4700	9.828023	75	9.869015	62	9.959008	137	10.040992	α 5300
01	098	75	9.868953	62	145	137	855	0.5299
02	173	75	891	62	282	137	718	98
03	248	75	829	62	419	137	581	97
04	323	75	767	62	556	137	444	96
05	398	75	705	63	693	137	307	95
06	473	74	642	62	830	137	170	94
07	547	75	580	62	9.959967	137	10.040033	93
08	622	75	518	62	9.960104	137	10.039896	92
09	697	75	456	63	241	137	759	91
α 4710	772	74	393	62	378	137	622	α 5290
11	846	75	331	62	515	137	* 485	89
12	921	75	269	62	652	137	348	88
13	9.828996	74	207	63	789	137	211	87
14	9.829070	75	144	62	9.960926	137	10.039074	86
15	145	75	082	62	9.961063	137	10.038937	85
16	220	74	9.868020	63	200	137	800	84
17	294	75	9.867957	62	337	137	663	83
18	369	74	895	63	474	137	526	82
19	443	75	832	62	611	137	389	81
α 4720	518	74	770	63	748	137	252	α 5280
21	592	75	707	62	9.961885	137	10.038115	79
22	667	74	645	63	9.962022	137	10.037978	78
23	741	75	582	62	159	137	841	77
24	816	74	520	63	296	137	704	76
25	890	74	457	62	433	137	567	75
26	9.829964	75	395	63	570	137	430	74
27	9.830039	74	332	63	707	137	293	73
28	113	74	269	62	844	137	156	72
29	187	75	207	63	9.962981	137	10.037019	71
α 4730	262	74	144	63	9.963118	137	10.036882	α 5270
31	336	74	081	62	255	136	746	69
32	410	74	9.867019	63	391	137	609	68
33	484	75	9.866956	63	528	137	472	67
34	559	74	893	62	665	137	335	66
35	633	74	831	63	802	137	198	65
36	707	74	768	63	9.963939	137	10.036061	64
37	781	74	705	63	9.964076	137	10.035924	63
38	855	74	642	63	213	137	787	62
39	9.830929	74	579	62	350	137	650	61
α 4740	9.831003	74	517	63	487	137	513	α 5260
41	077	74	454	63	624	137	376	59
42	151	74	391	63	761	136	240	58
43	225	74	328	63	9.964897	137	10.035103	57
44	299	74	265	63	9.965034	137	10.034966	56
45	373	74	202	63	171	137	829	55
46	447	74	139	63	308	137	692	54
47	521	74	076	63	445	137	555	53
48	595	74	9.866013	63	582	137	418	52
49	669	73	9.865950	63	719	137	281	51
α 4750	9.831742	73	9.865887	63	9.965856	137	10.034145	α 5250
Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.

α 525

o. 475

Arc.	Log. Sin.	D.	Log. Cosine.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.4750	9.831742	74	9.865887	63	9.965856	136	10.034145	0.5250
51	816	74	824	63	9.965992	137	10.034008	49
52	890	74	761	63	9.966129	137	10.033871	48
53	9.831964	74	698	63	266	137	734	47
54	9.832037	73	634	64	403	137	597	46
55	111	74	571	63	540	137	460	45
56	185	74	508	63	677	137	323	44
57	258	73	445	63	813	136	187	43
58	332	74	382	63	9.966050	137	10.033050	42
59	406	74	319	63	9.967087	137	10.032913	41
0.4760	479	73	255	64	224	137	776	0.5240
61	553	74	192	63	361	137	639	39
62	626	73	129	63	498	137	503	38
63	700	74	665	64	634	136	366	37
64	773	73	9.865002	63	771	137	229	36
65	847	74	9.864939	63	9.967908	137	10.032092	35
66	920	73	875	64	9.968045	137	10.031955	34
67	9.832994	74	812	63	182	137	818	33
68	9.833067	73	749	63	318	136	682	32
69	140	73	685	64	455	137	545	31
0.4770	214	74	622	63	592	137	408	0.5230
71	287	73	558	64	729	137	271	29
72	360	73	495	63	9.968866	137	10.031134	28
73	434	74	431	64	9.969002	136	10.030998	27
74	507	73	368	63	139	137	861	26
75	580	73	304	64	276	137	724	25
76	653	73	241	63	413	137	587	24
77	726	73	177	64	550	137	451	23
78	800	74	113	64	686	136	314	22
79	873	73	9.864050	63	823	137	177	21
0.4780	9.833946	73	9.863986	64	9.969960	137	10.030040	0.5220
81	9.834019	73	922	63	9.970097	137	10.029903	19
82	092	73	859	63	233	136	767	18
83	165	73	795	64	370	137	630	17
84	238	73	731	64	507	137	493	16
85	311	73	668	63	644	137	356	15
86	384	73	604	64	780	136	220	14
87	457	73	540	64	9.970917	137	10.029083	13
88	530	73	476	64	9.971054	137	10.028946	12
89	603	73	412	64	191	137	809	11
0.4790	676	73	348	64	327	136	673	0.5210
91	749	73	285	63	464	137	536	09
92	821	72	221	64	601	137	399	08
93	894	73	157	64	738	137	263	07
94	9.834967	73	093	64	9.971874	136	10.028126	06
95	9.835040	73	9.863029	64	9.972011	137	10.027989	05
96	113	73	9.862965	64	148	137	852	04
97	185	72	901	64	284	136	716	03
98	258	73	837	64	421	137	579	02
0.4799	331	73	773	64	558	137	442	01
0.4800	9.835403	72	9.862709	64	9.972695	137	10.027306	0.5200
Arc.	Log. Sine.	D.	Log. Cosine.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.

o. 520.

0. 480.

Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
0.4800	9.835403	73	9.862709	64	9.972695	136	10.027306	0.5200
01	476	73	645	64	831	137	169	0.5199
02	549	72	581	64	9.972968	137	10.027032	98
03	621	72	517	64	9.973105	137	10.026895	97
04	694	73	452	65	241	136	759	96
05	766	72	388	64	378	137	622	95
06	839	73	324	64	515	137	485	94
07	911	72	260	64	651	136	349	93
08	9.835984	73	196	64	788	137	212	92
09	9.836056	72	132	64	9.973925	137	10.026075	91
0.4810	129	73	067	65	9.974061	136	10.025939	0.5190
11	201	72	9.862003	64	198	137	802	89
12	273	72	9.861939	64	335	137	665	88
13	346	73	874	65	472	137	529	87
14	418	72	810	64	608	136	392	86
15	491	73	746	64	745	137	255	85
16	563	72	681	65	9.974882	137	10.025119	84
17	635	72	617	64	9.975018	136	10.024982	83
18	707	73	553	64	155	137	845	82
19	780	73	488	65	292	137	709	81
0.4820	852	72	424	64	428	136	572	0.5180
21	924	72	359	65	565	137	435	79
22	9.836996	72	295	64	701	136	299	78
23	9.837068	72	230	65	838	137	162	77
24	140	72	166	64	9.975975	137	10.024025	76
25	212	72	101	65	9.976111	136	10.023889	75
26	284	72	9.861036	65	248	137	752	74
27	357	73	9.860972	64	385	137	615	73
28	429	72	907	65	521	136	479	72
29	501	72	843	64	658	137	342	71
0.4830	573	72	778	65	795	137	205	0.5170
31	644	71	713	65	9.976931	136	10.023069	69
32	716	72	649	64	9.977068	137	10.022932	68
33	788	72	584	65	205	137	796	67
34	860	72	519	65	341	136	659	66
35	9.837932	72	454	65	478	137	522	65
36	9.838004	72	390	64	614	136	386	64
37	076	72	325	65	751	137	249	63
38	147	71	260	65	9.977888	137	10.022112	62
39	219	72	195	65	9.978024	136	10.021976	61
0.4840	291	72	130	65	161	137	839	0.5160
41	363	72	065	65	297	136	703	59
42	434	71	9.860000	65	434	137	566	58
43	506	72	9.859936	64	571	137	429	57
44	578	72	871	65	707	136	293	56
45	649	71	806	65	844	137	156	55
46	721	72	741	65	9.978980	136	10.021020	54
47	793	72	676	65	9.979117	137	10.020883	53
48	864	71	611	65	254	137	746	52
49	9.838936	72	546	65	390	136	610	51
0.4850	9.839007	71	9.859480	66	9.979527	137	10.020473	0.5150
Arc.	Log. Cosin.	D.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

0. 515.

o. 485.

Arc.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Arc.
o. 4850	9.839007	72	9.859480	65	9.979527	136	10.020473	0.5150
51	079	71	415	65	663	137	337	49
52	150	72	350	65	800	137	200	48
53	222	71	285	65	9.979937	136	10.020064	47
54	293	72	220	65	9.980073	137	10.019927	46
55	365	71	155	65	210	136	790	45
56	436	72	090	66	346	137	654	44
57	507	71	9.859024	65	483	136	517	43
58	579	72	9.858959	65	619	137	381	42
59	650	71	894	65	756	137	244	41
o. 4860	721	72	829	65	9.980893	136	10.019107	0.5140
61	793	71	763	65	9.981029	137	10.018971	39
62	864	72	698	65	166	136	834	38
63	9.839935	71	633	65	302	137	698	37
64	9.840006	72	567	65	439	136	561	36
65	077	71	502	65	575	137	425	35
66	149	72	437	66	712	137	288	34
67	220	71	371	65	849	136	152	33
68	291	72	306	65	9.981985	137	10.018015	32
69	362	71	240	65	9.982122	136	10.017878	31
o. 4870	433	72	175	65	258	137	742	0.5130
71	504	71	109	65	395	136	605	29
72	575	72	9.858044	65	531	137	469	28
73	646	71	9.857978	65	668	136	332	27
74	717	72	913	65	804	137	196	26
75	788	71	847	65	9.982941	136	10.017059	25
76	859	72	782	66	9.983078	137	10.016923	24
77	9.840930	71	716	65	214	136	786	23
78	9.841001	72	650	65	351	137	650	22
79	072	71	585	65	487	136	513	21
o. 4880	143	72	519	65	624	137	376	0.5120
81	213	71	453	65	760	136	240	19
82	284	72	387	65	9.983897	137	10.016103	18
83	355	71	322	65	9.984033	136	10.015967	17
84	426	72	256	65	170	137	830	16
85	496	71	190	65	306	136	694	15
86	567	72	124	66	443	137	557	14
87	638	71	9.857059	65	579	136	421	13
88	709	72	9.856993	65	716	137	284	12
89	779	71	927	65	852	136	148	11
o. 4890	850	72	861	65	9.984989	137	10.015011	0.5110
91	920	71	795	65	9.985125	136	10.014875	09
92	9.841991	72	729	65	262	137	738	08
93	9.842062	71	663	65	398	136	602	07
94	132	72	597	65	535	137	465	06
95	203	71	531	65	671	136	329	05
96	273	72	465	66	808	137	192	04
97	344	71	399	65	9.985945	136	10.014056	03
98	414	72	333	65	9.986081	137	10.013919	02
o. 4899	484	71	267	65	218	136	783	01
o. 4900	9.842555	72	9.856201	65	9.986354	137	10.013646	0.5100
Arc.	Log. Cosin.	D.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arc.

o. 510.

Arg.	Log. Sin.	D.	Log. Cos.	D.	Log. Tang.	Dif.	Log. Cot.	Arg.
0.4900	9.842555	70	9.856201	66	9.986354	137	10.013646	0.5100
01	625	71	135	66	491	136	510	0.5099
02	606	70	069	67	627	137	373	98
03	766	70	9.856002	66	764	136	237	97
04	836	71	9.855936	66	9.986900	137	10.013100	96
05	907	70	870	66	9.987037	136	10.012964	95
06	9.842977	70	804	66	173	137	827	94
07	9.843047	70	738	67	310	136	691	93
08	117	71	671	66	446	137	554	92
09	188	70	605	66	583	136	418	91
0.4910	258	70	539	67	719	137	281	0.5090
11	328	70	472	66	856	136	145	89
12	398	70	406	66	9.987992	137	10.012008	88
13	468	70	340	67	9.988128	136	10.011872	87
14	538	70	273	66	265	137	735	86
15	608	70	207	67	401	136	599	85
16	678	70	140	66	538	137	462	84
17	748	70	074	66	674	136	326	83
18	818	70	9.855008	67	811	137	189	82
19	888	70	9.854941	66	9.988947	136	10.011053	81
0.4920	9.843958	70	875	67	9.989084	137	10.010916	0.5080
21	9.844028	70	808	67	220	136	780	79
22	098	70	741	66	357	137	643	78
23	168	70	675	67	493	136	507	77
24	238	70	608	67	630	137	370	76
25	308	70	542	66	766	136	234	75
26	378	70	475	67	9.989903	137	10.010097	74
27	448	70	408	66	9.990039	136	10.009961	73
28	517	69	342	67	176	137	824	72
29	587	70	275	67	312	136	688	71
0.4930	657	70	208	67	449	137	551	0.5070
31	727	70	141	67	585	136	415	69
32	796	69	075	66	722	137	279	68
33	866	70	9.854008	67	858	136	142	67
34	9.844936	69	9.853941	67	9.990995	137	10.009006	66
35	9.845005	70	874	67	9.991131	136	10.008869	65
36	075	70	807	67	267	136	733	64
37	144	69	741	66	404	137	596	63
38	214	70	674	67	540	136	460	62
39	284	70	607	67	677	137	323	61
0.4940	353	69	540	67	813	136	187	0.5060
41	423	70	473	67	9.991950	137	10.008050	59
42	492	69	406	67	9.992086	136	10.007914	58
43	562	70	339	67	223	137	777	57
44	631	69	272	67	359	136	641	56
45	700	69	205	67	496	137	504	55
46	770	70	138	67	632	136	368	54
47	839	69	071	67	769	137	232	53
48	909	70	9.853004	68	9.992905	136	10.007095	52
49	9.845978	69	9.852936	67	9.993041	137	10.006959	51
0.4950	9.846047	69	9.852869	67	9.993178	137	10.006822	0.5050
Arg.	Log. Cosin.	D.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Arg.

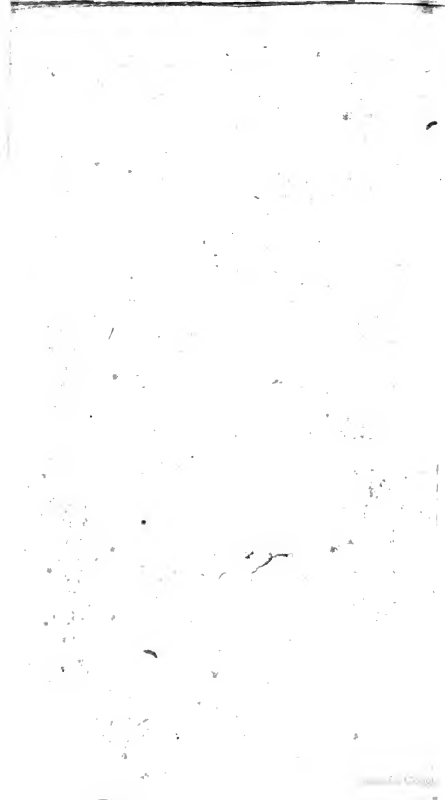
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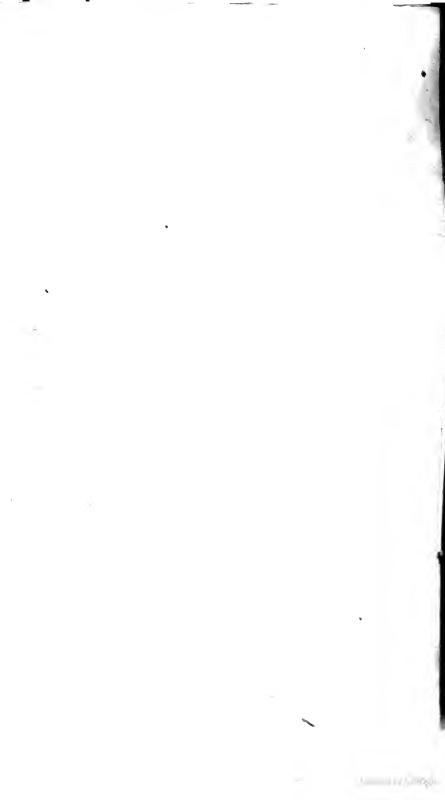
Are.	Log. Sin.	D.	Log. Cosin.	D.	Log. Tang.	Dif.	Log. Cot.	Are.
0.4950	9.846047	69	9.852869	67	9.993178	136	10.006822	0.5050
51	116	70	802	67	314	137	686	49
52	186	69	735	67	451	136	549	48
53	255	69	668	67	587	137	413	47
54	324	69	601	67	724	137	276	46
55	393	69	533	68	860	136	140	45
56	463	70	466	67	9.993997	137	10.006003	44
57	532	69	399	67	9.994133	136	10.005867	43
58	601	69	331	68	270	137	731	42
59	670	69	264	67	406	136	594	41
0.4960	739	69	197	67	542	136	458	0.5040
61	808	69	129	68	679	137	321	39
62	877	69	9.852062	67	815	136	185	38
63	9.846946	69	9.851995	67	9.994952	137	10.005048	37
64	9.847015	69	927	68	9.995088	136	10.004912	36
65	084	69	860	67	225	137	775	35
66	153	69	792	68	361	136	639	34
67	222	69	725	67	498	137	503	33
68	291	69	657	68	634	136	366	32
69	360	69	590	67	770	136	230	31
0.4970	429	69	522	68	9.995907	137	10.004093	0.5030
71	498	69	454	68	9.996043	136	10.003957	29
72	566	68	387	67	180	137	820	28
73	635	69	319	68	316	136	684	27
74	704	69	252	67	453	137	547	26
75	773	69	184	68	589	136	411	25
76	842	69	116	68	726	137	275	24
77	910	68	9.851048	68	862	136	138	23
78	9.847979	69	9.850980	68	9.996998	136	10.003002	22
79	9.848048	69	913	67	9.997135	137	10.002865	21
0.4980	116	68	845	68	271	136	729	0.5020
81	185	69	777	68	408	137	592	19
82	254	69	710	67	544	136	456	18
83	322	68	642	68	681	137	320	17
84	391	69	574	68	817	136	183	16
85	459	68	506	68	9.997953	136	10.002047	15
86	528	69	438	68	9.998090	137	10.001910	14
87	596	68	370	68	226	136	774	13
88	665	68	302	68	363	137	637	12
89	733	68	234	68	499	136	501	11
0.4990	802	69	166	68	636	137	364	0.5010
91	870	68	998	68	772	136	228	09
92	9.848939	69	9.850030	68	9.998909	137	10.001092	08
93	9.849007	68	9.849962	68	9.999045	136	10.000955	07
94	075	68	894	68	181	136	819	06
95	144	69	826	68	318	137	682	05
96	212	68	758	68	454	136	546	04
97	280	68	690	68	591	137	409	03
98	349	69	621	69	727	136	273	02
0.4999	417	68	553	68	9.999864	137	136	01
0.5000	9.849485	68	9.849485	68	10.000000	136	10.000000	0.5000
Are.	Log. Cosin.	D.	Log. Sin.	D.	Log. Cot.	Dif.	Log. Tang.	Are.

0. 500.

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Q. 1. In 1816, 115.



